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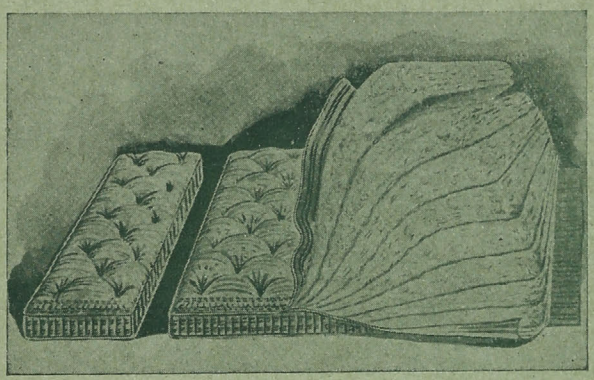
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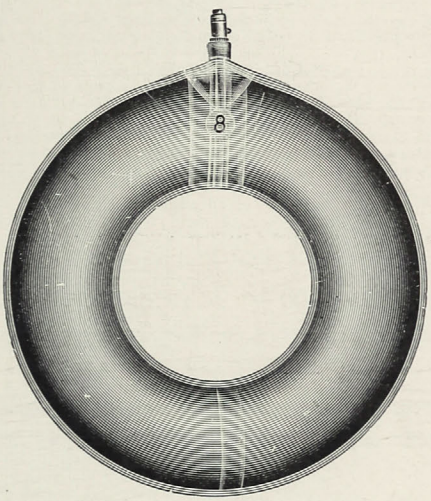
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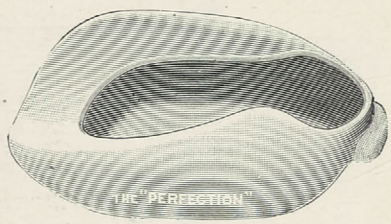
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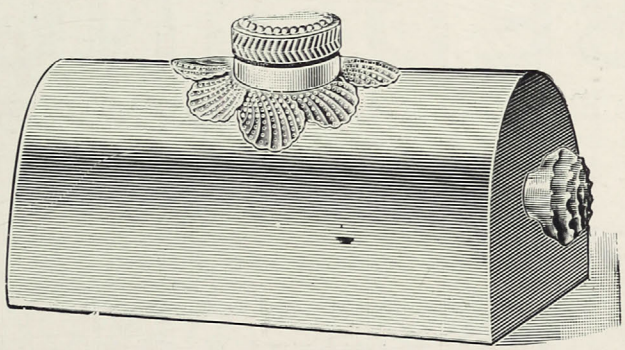
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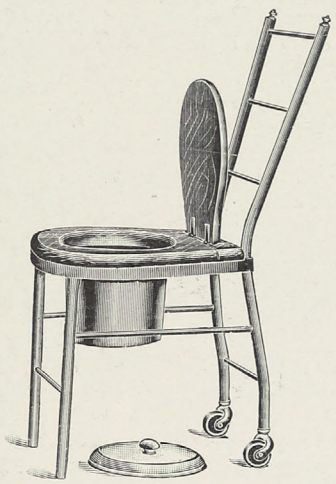
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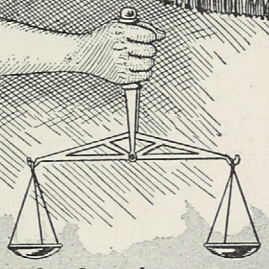
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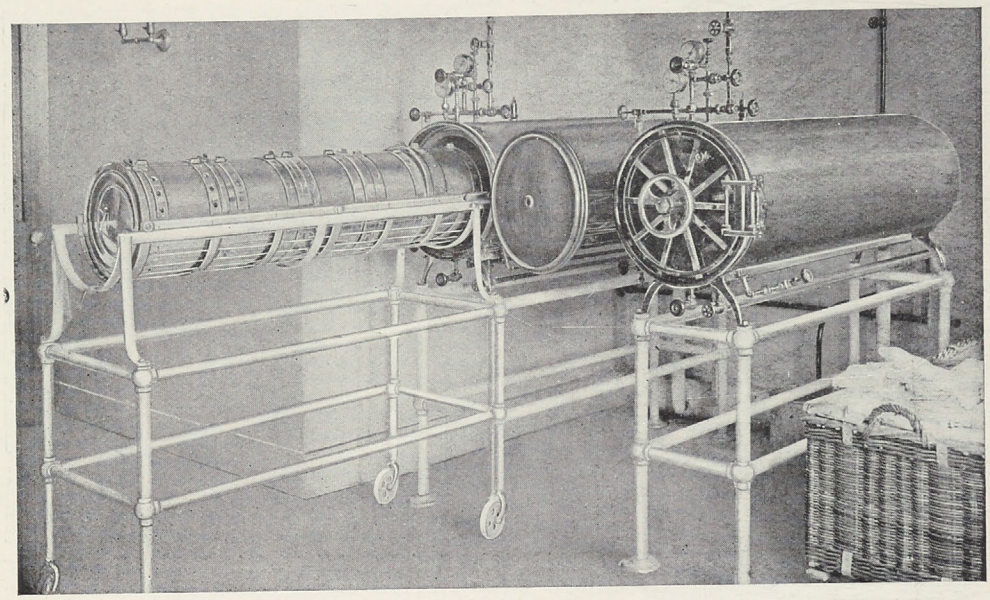
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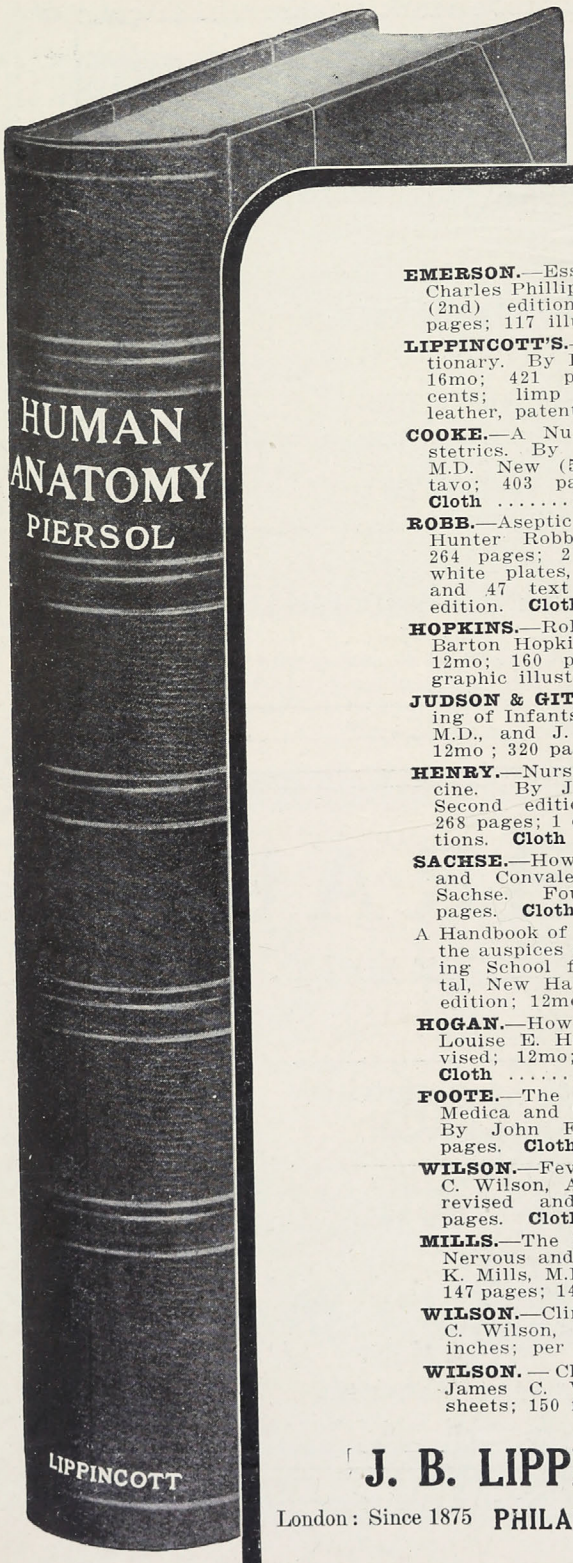
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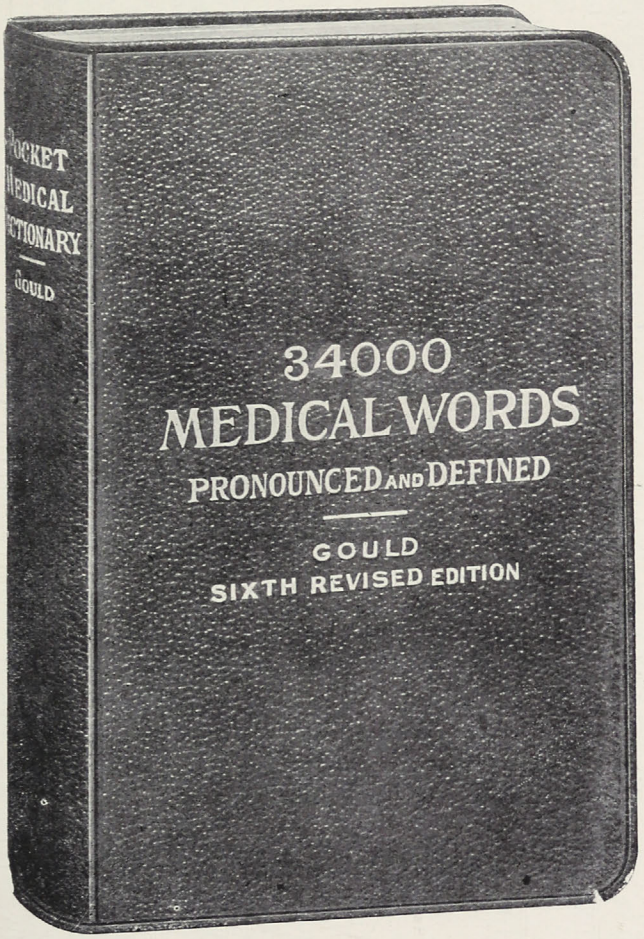
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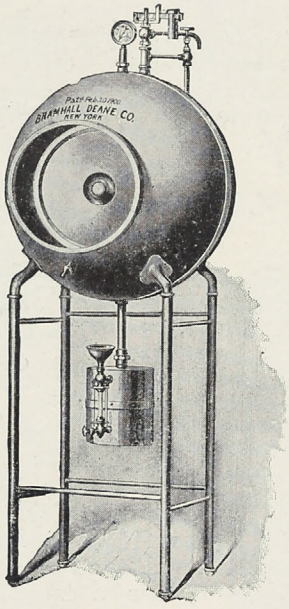
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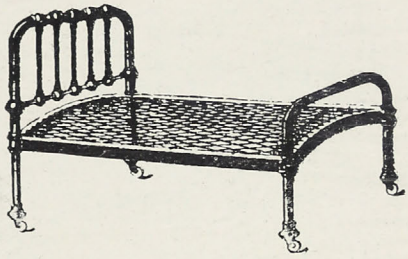
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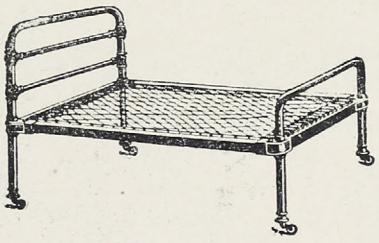
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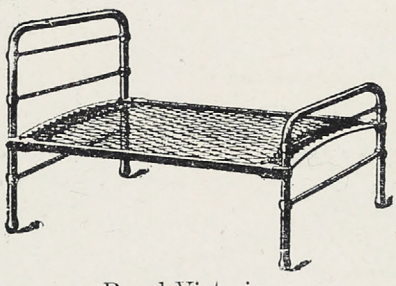
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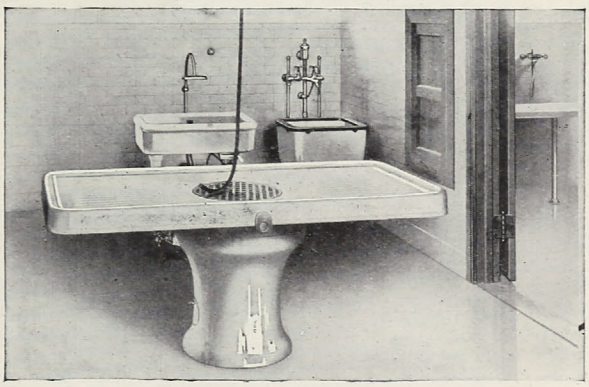
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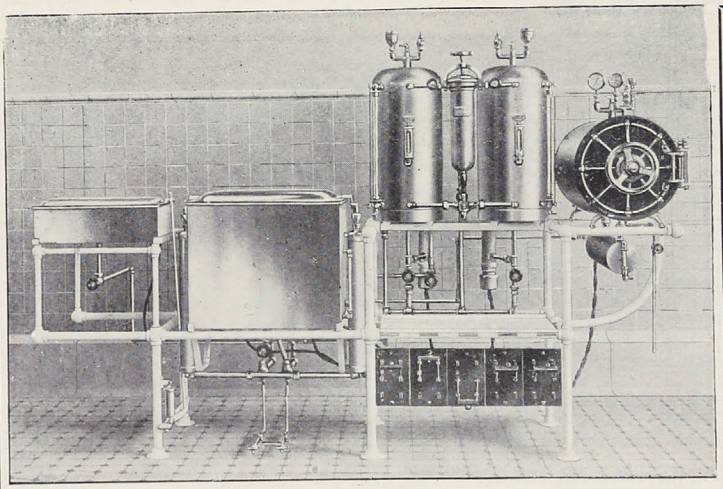


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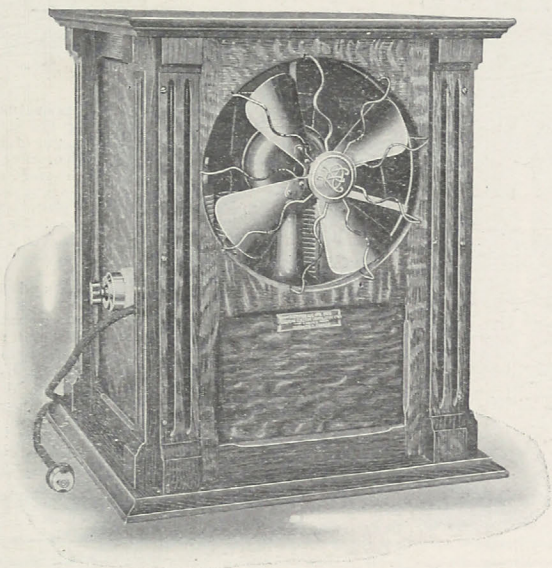
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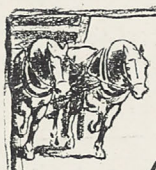
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Editorials

SCIENCE AND THE FAITH THAT UPLIFTS

THE nations honored him; the wide world kneels in gratitude to him; and yet this great benefactor of the race was, of all men, most kindly and unaffected.

Lord Lister had a personality that endeared him to all who met him. It was his sympathy with suffering that urged him in his quest; it was that same keen sympathy that made the long scepticism of his colleagues hard to bear.

He carried the same child-like and lovable spirit

into the spiritual realm; his faith was simple and strong.

When the British Science Association met in Toronto, in the late nineties, Lord Kelvin and Lord Lister were both in attendance. The Association closed a session crowded with keen scientific interest and brilliant with addresses and discussions by men world-eminent in their respective fields of research.

The weather was hot, the delegates fatigued, and many escaped out of town; but a few remained over the week-end; and on the Sunday afternoon they met in an upper room of the Toronto University for a brief closing hour of thanksgiving and prayer.

On the platform were several of the world's foremost scientists, and chief among them was Lord Lister.

Those who were privileged to be present at that small, informal gathering will remember always the famous surgeon's words of child-like faith and strong spiritual uplift.

THE HOUSE SURGEON

We confess to a personal preference for the term "House Surgeon" as embracing house physician, house gynecologist, and what not.

The House Surgeon (as we shall then call him), in many quarters, is in receipt of scant consideration by Boards of Trustees, Superintendents of Nurses,

and by certain of the public; in fact, he is often made the subject of contemptuous reference. The adjective "young" is often applied to him in a deprecatory sense. He is frequently accused of *magnum caput*.

Why is this?

Does he, bearing a sense of conscious superiority over his less fortunate competitors and fourth year students, direct his chin at too high an angle? Does pride show itself as a result of the new power he has given him of transmitting orders to docile young ladies in uniform? Or does dignity set too heavily on the young medical aristocrat who, newly fledged, clad in his white duck suit, reigns as a small king over forty or fifty subject patients?

After four or five years, filled with "plugging" and self-denial, does the final reward of a house-surgeoncy lead to a re-bound which shows itself in a change of manner and disposition, reacting unfavorably on the reputation of the medical neophyte? Does the somewhat respectful and timid fourth year man metamorphose suddenly into a bold and cheeky autocrat, as a result of a sudden and unexpected elevation?

We must admit that sometimes this is the case. On every house-staff of ten men you will find one or two who have hereditary or acquired Big Head. They have forgotten their freshman reward for cheek, and by their manner and conduct reflect on the whole house staff body. And often it requires months of tuition from his fellows to round off his angles and make him a tolerable house-mate.

He knows it all. He dictates to the rest of the boys. He even gives his chief pointers. But at the end of a fortnight a post mortem is held on one of his patients. The pathologist finds the bladder distended to the umbilicus. This is the beginning of the atrophy of his haughtiness. And he learns sense by degrees, gradually becoming amenable to the ways of the institution. But his "breaks" reflect more or less discredit on the hospital which breaks him and on the whole house surgeon body.

COST ACCOUNTING

Of the five thousand hospitals on the American Continent, only a few can answer within a few minutes, if at all, such questions as the following:

How is it we used $38 worth of alcohol last month and only $27 worth the month before? Where was the extravagance—in the operating-room, in the dispensary, or in the Carnegie public ward?

How much catgut did Surgeon H— use last month, as compared with the amount used by Surgeon B—? What amount did each use per operation?

How much tea per day per patient did Nurse Jones use in surgical unit X, as compared with the amount used by Nurse Brown in surgical unit Y?

What does it cost your hospital to train a pupil nurse? How much for her food, heat, light, uniforms, books, respectively?

What does it cost to maintain a house officer?

How does your electric light bill for the past week correspond with that for the corresponding week last year?

What does it cost per day per patient to keep your hospital clean?

Did the servants eat more butter yesterday than they did on the corresponding date last month?

How much money shall your Finance Committee appropriate for you to spend for the maintenance of your hospital next week?

In Great Britain, most hospital superintendents or secretaries (if the London hospitals are a criteria) can reply to these questions readily. As a consequence, one sees greater economies and a steadier hold on expenditure than one sees on this side of the Atlantic.

In St. Luke's, Jacksonville; the New York, N.Y.; Worcester, Mass.; Toronto General, and a number of other American hospitals, fine accounting systems have been introduced, such as obtain in most of the up-to-date business concerns.

No Superintendent should approve of a requisition on him, by a subordinate, for fresh supplies, unless he is satisfied, or can at once satisfy himself, by facts from his accounting department, that the last supplies obtained by this subordinate were economically distributed. He should not purchase any more supplies without knowing that the last amount purchased lasted as long as they should; and if they have not lasted as long as they should, he should know where the leak was.

No Superintendent should rest content, no Board of Trustees should be satisfied, with an administration where there is no cost accounting.

It may cost a couple of hundred dollars to instal it; it may need one or even two clerks to run it; but it will pay for its installation and maintenance many times over in a short period of time.

GOVERNMENT HOSPITAL BUREAU

THE proposal to establish a Bureau of Hospital Information, under Government auspices, cannot fail to enlist the interest of hospital administrators the country over. The "rule of thumb" methods in vogue in so many of our hospitals have been a distinct drag on their development, and while the last decade marked a great advance medically, the administrative branch is just beginning to awake to its obligations to the public.

The dividend paid by hospitals is not in legal tender, but in increased relief to the suffering, and in raising the medical standards in the community; and when we realize that the six thousand hospitals in the United States could, with proper administration, increase their "dividends" by at least 10 per cent.—and that, we believe, is a very conservative estimate—which would mean relief from suffering to 400,000 individuals, the vital need of a development of our administrative possibilities is evident.

To meet the great need, it was proposed, some

years ago, to establish a Bureau of Hospital Information; but after two years' investigation it was decided that the Association was in no position to finance such a bureau. Then it was proposed that, inasmuch as the Federal Government was by far the greatest supporter of hospitals, and as it was a matter of greatest moment to the people of the whole country, the Government was the most suitable agency to establish and maintain such a bureau.

To this end, the committee then bent its energies, and at the New York meeting was able to report the draft of a bill by the late Surgeon-General Wyman, of the Bureau of Public Health and Marine Hospital Service, with the approval of the Honorable, the Secretary of the Treasury, which, stripped of its legal phraseology, provides for the "collection, classification and dissemination of plans, specifications, reports and other matters of interest to hospital administrators."

We understand that the bill is to come before Congress at the present session, and it is up to the hospital interests of the country to see that it receives the favorable consideration it merits.

The establishment of this Bureau in the Public Health and Marine Hospital Service ensures its safety from prostitution by private interest, guarantees stability, and as this Bureau is to become, under the Owen Bill, a part of the Federal Department of Health, provides that its future will be in hospitable hands. Once established under such auspices, we can be certain of a conservative, but

steady, growth of the Bureau to meet the demands of hospital administration, and it is probable that ultimately much can be accomplished in investigation, particularly along the line of standards for supplies, more definite standards of construction details, of staff organization, of ward equipment, of better accounting methods, and of the thousand and one minor problems which confront the hospital administrators every day. This information could then be disseminated, either on special application or in the form of bulletins similar to the authoritative and invaluable Bulletins of the Hygiene Laboratory, or the very popular Farmer's Bulletin of the Department of Agriculture.

The ultimate good to the poor and suffering of the country can scarcely be measured, as it would not only enable us to do greater good with our present budgets, but, by making us better administrators, the conviction that the money would be wisely spent and properly accounted for, would be certain to lead to increased benefactions, which merely means relief to more suffering.

Original Contributions

THE PREVENTION OF FIRE*

BY DR. W. J. DOBBIE,
Physician-in-Chief, Toronto Free Hospital, Weston.

Madam President, Ladies and Gentlemen:

Having achieved the rather unenviable notoriety of having had the hospital with which I am connected burned to the ground, your Executive Committee generously considered that I should be given as well the desirable distinction of an opportunity to address you on this occasion on the subject of "The Prevention of Fire." The subject is perhaps not only timely, but of more or less general interest to those who may have the responsibility of safeguarding the lives of the sick and the helpless in institutions of various kinds.

I have therefore the more willingly, on account of the importance of the subject, undertaken to compile some information on the one hand as to things which ought not to be done, and some on the other concerning things that ought to be done, if the institutions in which we live and work are to be reasonably safe from the devastating ravages of the most destructive agent known as "Fire."

For the former of these (viz., things that ought not to be done), it may be presumed that I am myself a sufficient authority, while for the latter (things that ought to be done) I may say that I have freely sought the assistance of others, among whom were many of yourselves. And I trust that the combined result may be found of assistance to every hospital superintendent in the land.

At the outset, then, perhaps it may be pardonable for me to relate to you briefly our own experience, since it illustrates very forcibly some of the points to be subsequently made. As you may perhaps remember, the Toronto Free Hospital was destroyed on the morning of December the first, last. In it at the time were some 110 patients, of whom about 50 were confined to bed and practically helpless. These latter further, as fortune would have it, were located in the section destroyed, about 12 being on the ground floor, and the remaining 36 on the first floor.

*Read at the last Meeting of the Canadian Hospital Association.

At about 2.15 a.m. the attention of the senior night nurse was drawn by one of the patients to the fact that he smelled smoke. She immediately ran to the diet kitchen, sitting-room, main kitchen, etc., to see if by any chance the smoke arose from some trifling cause. Finding everything as usual, she ran to inspect the furnace-room in the basement, and discovered even before she reached it that the trouble was centred in that locality. Here the nurse, without time for second thought, displayed most excellent judgment in that (1) she realized at once that the cause of the smoke was too serious for her to attempt to handle alone, and (2) in immediately, without alarming anyone else, running to awaken the nurses and employees in their respective cottages.

She thus had at hand in a few moments some thirty helpers, to each of whom had been assigned months previously his or her particular duty in just such an emergency. And I may perhaps pause here to remark that one of my greatest regrets is that I was not privileged to witness what I am told was a splendid sight to see, namely, employees and nurses rushing out into the night scantily clad, two in this direction, three in that, and so forth—each to reach his post of duty with the least possible delay.

The rule had always been that patients were to be removed first, and as each man had his particular wards assigned to him, it was but a very few minutes before every patient had been safely removed. There was no confusion, and little excitement. No one was injured in any way, and no mistakes were made, though the corridors were dense with smoke and the extent of the fire at this time could only be judged by the reflection from the flames as they rapidly made their way from the basement to the ground floor. Nothing of any value was saved, except some mattresses and bedding, which the nurses threw out of the windows, to be used immediately for the rescued patients.

Two interesting events may also be mentioned: (1) The roll call at 3 a.m., at which every patient, nurse and employee was accounted for; (2) at 7 a.m. the busy scene of providing breakfast, with improvised equipment from impoverished stores, served but to emphasize the surplus of good fellowship which nothing but common disaster or adversity seems able to discover. And if one were able, without seeming to boast, to refer to the faith-

fulness and unselfishness of one's employees, it would only be expressing a natural pride which one takes in finding qualities in men and women hitherto unseen or even imagined.

It is very gratifying indeed, ladies and gentlemen, to know that these things were all done by ordinary employees and nurses, just such as you all have in your respective institutions, and done also without previous experience, as the result simply of preliminary instruction. It tends, as I take it, to strengthen the confidence of the public in institutions and to relieve from the superintendents much of their load of care, inasmuch as what men and women have done men and women can do, and will do, doubtless, when the occasion again arises, whether it be in your institution or in mine.

To come, however, to the subject of the paper, I may say that a list of questions was sent to some 150 hospitals in Canada and the United States. The questions are as follows:

1. How many patients' beds are there in your hospital?
2. Do you employ a night watchman?
3. If so, has he any other duties besides those of night watchman?
4. What fire appliances are on hand in your hospital?
5. What is the nature of your water supply for fire purposes?
6. Do you have "fire drill"?
7. If so, of what does it consist?
8. What measures have you adopted to secure the safe removal of patients in case of fire?
9. Have you ever had a fire? If so, what have you learned from it?
10. What are your special ideas on the subject of fire?

A large number of replies were received, and from these the material in the subsequent portion of this paper has been compiled.

HOSPITAL CONSTRUCTION.

With a degree of unanimity hardly to be expected a large majority have pronounced in favor of fireproof hospital buildings. No doubt this has been due in a large measure to the fact that the writers have from experience been brought to realize the insecurity of buildings otherwise constructed.

One writer says: "All buildings for the reception of sick, in-

jured or insane people should be so constructed as to be absolutely fireproof.

"In all hospitals of more than one flat there should be an elevator so placed and so constructed that a fire in the neighborhood of or in the elevator well would be an absolute impossibility.

"Pavilions should be so arranged that they could be at once shut off from each other by fire doors. In the construction of a fireproof building all partitions should be of brick, terra cotta, stone or metal. The floors should be cement, carried on steel beams. Covering the cement there should be a layer of some of those fireproof compositions. A wooden floor should not be laid in the wards of any hospital. The plaster on the walls and ceilings should be spread upon expanded metal lath. The only woodwork, therefore, that should be found about a hospital would be that necessary to make the plainest form of door, and these in turn should be covered with some metal sheeting. A hospital so constructed has nothing whatever that could burn but the bedclothing that may be over the patient. I may go the length of saying that the provincial governments for all the provinces should regulate by legislation the construction of hospitals, so as to make them conform with the foregoing idea."

This, I think, fully covers the matter of hospital buildings. In these days, when factories, offices and warehouses are being so constructed, it is little less than criminal to house the sick, the helpless or the insane in buildings of an inflammable nature. The fact remains, nevertheless, as may be judged from the replies received, that the fireproof hospital building is just as rare as is the board of trustees alive to the need of such a structure.

FIRE APPLIANCES.

On the subject of fire appliances one is at once impressed by the regularity with which certain equipment has been reported as being in use. The most common are:

(1) Hydrants and hose.
(2) Fire pails.
(3) Chemical fire extinguishers.

This is of interest, inasmuch as it illustrates the extent of the average idea as to what constitutes fire protection. These articles comprise the ordinary equipment which one sees in al-

most any building, and while no doubt at times they have been found extremely useful, as I can attest from personal experience, yet I think it may also be safely asserted that they but too frequently serve merely to lull the occupants into a feeling of false security. In our own fire, to which I have referred, all of these things were provided, but were of absolutely no use, inasmuch as the site of the fire could not be reached. What we most needed was an axe and a saw, and, as fortune or bad management would have it, all of these were neatly stored in the basement, where the fire originated. These useful articles should be located at various points throughout the buildings, and should be plainly labelled "For Fire Only."

Among other appliances mentioned were: Ropes, ladders, stretchers, blankets, etc. In connection with the latter a most ingenious and valuable suggestion was that of a woolen blanket, and a bathtub filled with water at nightfall. This equipment on each flat might prove most useful in many ways in quenching an incipient blaze.

Fire escapes are nearly always mentioned as being of great value. My own opinion is that, as ordinarily constructed, located, and used, they are greatly over-rated. To be of much service a fire escape should be liberal in its dimensions, so even those unskilled in gymnastics might have some chance of descending by them. They should, moreover, be located so as to be in constant use. Our fire escapes were not used at all at the time of the fire, though conveniently located, and the reason given by employees and others was that in carrying out a patient they did not care to risk the route with which they were not familiar. Fire escape exits, if in daily use, could be made of great value, but otherwise they will only be used when absolutely necessary, and then accidents are likely to occur. It may further be noted that when fire escapes are placed on the outside of a building they should be placed against a blank wall, and should not, as is often the case, pass in front of windows.

A much better arrangement, however, is to provide fireproof stairways, so arranged with automatic fire doors that the fire may be prevented from spreading from one floor to another.

It would also seem to be desirable that some reference should be made to the value of the automatic sprinkler system, which

could at least be installed in such portions of every hospital building as are most likely to be the site of origin of a fire, such as furnace rooms, main kitchens, diet kitchens, laundries, etc. The construction of such a system is such that when a temperature of, say 155 F. is produced, a connecting link is fused and a shower of water released at the point at which the fire is located.

In connection with these systems there can also be installed an automatic alarm, which may be either in the form of a special gong or connected to the ordinary annunciator. These systems may be connected with city water works supply, gravity tank erected on a tower above the highest point of the building, or with a fire pump.

FIRE DRILL.

On the subject of fire drill there seems to be a great difference of opinion. Not only are there as many hospitals without fire drill as with it, but the nature of the drill differs essentially in many particulars in the hospitals where it obtains. I think, however, that it may safely be said that in every hospital the matter of what to do in case of fire should be seriously considered, so that some definite plan of action may be thoroughly understood by those whose duty it is to guard the lives of the sick and the helpless who have for the time being been entrusted to their care.

It would be unwise, however, as I take it, to go to the extreme of saying, or even recommending, that an actual drill should be practised, because in many of the smaller institutions such a procedure is a practical impossibility, and would if attempted be little short of a farce. The paramount difficulties are two in number: (1) That employees change too frequently to enable results to be obtained; (2) very few hospitals have on their staff a person competent to organize and direct such a drill. In these cases it is much better that something less pretentious but more within their reach be attempted. A plan of action carefully thought out by the superintendent, in which a few definite duties are assigned to different members of the staff, will produce much better results in time of need. In our own experience we never had an actual test or drill. Each individual knew, however, where his or her post of duty was, and the result was satisfactory to a degree beyond all expectation.

Each hospital superintendent must decide what is the best

thing to be done in his or her hospital. Give each person one clearly defined duty to perform and keep that prominently before them. My own method is to have typewritten cards tacked on the door of each person's bedroom. That supplies the information. Perhaps once a month, as each employee comes to the cashier for his wages, I question him as to his duty in case of fire. If he cannot answer satisfactorily he cannot draw his pay. Perhaps each month one or two are sent back, but the same man is never caught a second time.

Some of the larger institutions, however, deem it wise to have an actual test. This makes it necessary, of course, to have a false alarm of some kind. This in itself I consider a serious objection to this system, because no matter how much care is taken to warn patients that false alarms for fire are likely to be given, there is also a certain degree of excitement and anxiety produced, which is to say the least very undesirable. For those, however, who wish to have an actual test all that is necessary is: (1) To systematize the duties of all persons employed, and (2) to provide a suitable alarm.

In arranging a scheme of duties a plan has been described by Richard H. Townley, Superintendent Lincoln Hospital and Home, as follows:

"An efficient fire drill, whether for a hospital of fifty beds or one thousand beds, can be made with very little trouble. Each person has a number—no personality—so that if Susan Brown, one of the laundresses, No. 17, for instance, or 127, is discharged and her place is filled by somebody else, her successor takes that number, and she is given a card when she is employed by the hospital, telling what her duties are at fire drill. Then at the fire drill either yourself or your assistant see that every station, every duty, is actually carried out. It is not necessary to start the water at all times, but be ready to start it."

The great objections I see to this system are: (1) That every time a new employee is engaged his number must be assigned him and his card of instruction given him, and (2) that employees are assigned duties in accordance with the work performed, and not according to the location of their sleeping quarters, which is I think a most important provision to make. These are obviated by having the duties determined by the room occupied, as I have previously indicated.

NIGHT WATCHMEN.

My inquiries have revealed the fact that in hospitals of 100 beds or less a night watchman is rarely employed. In hospitals of more than 100 beds one is usually employed. Further, in those hospitals in which a watchman is employed, there are only a very few cases in which he has not other duties to perform, such as those of night fireman, night orderly, night porter, etc.

I believe that every hospital could with advantage employ a night watchman. But I am equally certain that his services will be of little value unless checked by an automatic clock. Portable clocks, which the watchman can carry with him, are to be had. These record on a paper disk the time at which the watchman reports at different stations. They are absolutely sure in their records, and the watchman must report at each station in order to punch the paper disk, and the time and station are accurately recorded in every case.

REMOVING PATIENTS.

The safe removal of patients may, as I take it, be considered one of the most important measures. Care should be taken that every ward is manned by a sufficient number of helpers to care for all the patients without loss of time.

In our experience the helpless patients were much less trouble than those able to help themselves. The former were picked up bodily and carried to a place of safety. The latter became excited, and in some cases stubborn, and required a deal of watching to prevent accidents or loss of life through their confusion as to routes, etc. Stretchers of special design should be provided for such patients as cannot well be moved otherwise. Horse blanket pins in each ward would appear to be useful, a patient being pinned in a blanket so that two people can carry him conveniently.

The military method of carrying a patient by means of a single bearer should be learned by all nurses, as by that method a person weighing 115 or 120 pounds can carry another of much greater weight.

A number of good ideas have been received, which I take the liberty of incorporating. Among these are:

(1) Attention to chimneys and flues.

(2) Fire doors.
(3) Fire shutters.
(4) Abolition of parlor matches in hospitals.
(5) Dangers from Christmas decorations and fireworks.
(6) Cellars and closets to be kept free from collections of waste.
(7) Daily inspections.
(8) Instruction given to staff by member of fire brigade.
(9) Oily cloths should be burned immediately, and not put into drawers or cupboards.
(10) Special alarm direct to city fire hall.
(11) Visit furnace room and kitchens often.

In conclusion, it may be said that so many suggestions have been received that it has been quite impossible to make acknowledgment individually. I desire, however, to express my appreciation of the great assistance thus received, without which indeed this paper would have been impossible. I trust, moreover, that our combined effort may prove of assistance to many, and that superintendents and boards of trustees may everywhere be incited to assure themselves of the safety of the sick and the helpless who have been entrusted to their care.

DISCUSSION.

Dr. Boyce: We were unfortunate enough this spring to have a small fire, and I was absolutely charmed the way the nurses conducted themselves. They did not lose their heads in any particular. A visitor inside said that everything went on in whispers. Indeed one ward slept through it, on the lower floor. One nurse was promised a place on the fire brigade if she ever wanted it. When she was commended and asked for particulars, she said: "You can get all the information in the hospital. We are not allowed to give information. We simply did what we were trained to do."

Miss Green: Nurses do not lose their heads when it comes to an emergency.

Mr. J. Ross Robertson:

Madam President,—I have been much interested in the papers I have heard read to-day, the first by your good self, the second by our friend Miss Miller, the third by Dr. Dobbie, and the fourth by Dr. Kendall, of Gravenhurst.

I felt like saying a few words after the reading of each of these papers, but thought better to leave the discussion to those who were better informed than I am on the subjects contained in the papers read.

There are, however, some points that I would like to refer to in connection with the remarks by Dr. Boyce. He referred to the reception of patients and the efforts that he made in his hospital to please the patients, and so avoid the growling and grumbling that is indulged in by many who seek hospital treatment.

Now, to my mind, there is too much coddling of patients. Some of those who apply for hospital treatment make most unreasonable requests. This is what my friends who are in charge of adult hospitals in Canada tell me, and some of my informants, too, are concerned with hospitals in the United States.

In the Hospital for Sick Children we have like troubles. Parents sometimes make unreasonable requests and occasionally endeavor to break through every rule and regulation made for the government of the hospital. But we get over the difficulty in a very simple manner. My superintendent courteously says, if the request cannot be granted, that to grant it would be a violation of the regulations of the hospital, and that ends the matter. Parents occasionally declare that if their requests are not granted they won't place their child in the hospital. Well, the parent is informed that no one is forcing him or her to leave the child in our care; but we notice they usually leave the child all the same. We don't have a great deal of friction, and we try to avoid it if possible.

If at any time we do for good and sufficient reasons depart from our rules and grant a privilege, we find that that is the very case we have most trouble with.

Dr. Dobbie refers in his paper to the material to be used in the flooring of hospitals—in an absolutely fireproof building. Well, there is a great difference of opinion as to which is the best kind of flooring for hospitals. You know there are fifty-seven varieties of pickles, and there are fifty-eight varieties of opinion on this subject. In Canada we have so few—hardly any—architects that are competent to build hospitals that in seeking opinions on the subject we have to take advice from the specialists

in the United States and Great Britain who devote their entire time to hospital construction. Maple and oak floors are serviceable, and are the best in the opinion of many. I would prefer a well-made maple floor, especially selected stuff, laid on concrete. Of course, that would be in a fireproof building. It's all very well for Dr. Dobbie to say that we must have fireproof buildings, but that means increase in cost, yes, double the cost, of the ordinary slow-burning construction building.

I have seen ordinary floors in European and British hospitals covered with linoleum, and the superintendents rather like that kind of covering for a floor. We have a ward in our hospital so covered, and my superintendent and her assistants think well of it. It certainly can be readily cleaned. Some years ago, at a meeting of the American Hospital Association, a superintendent claimed that infection was twenty-five per cent. less in a ward where the floor was so covered than in a ward with the ordinary wood floor, where the shrinkage leaves the intersections between the boards open for the collection of dust and germs. But then, if we are to have first-class construction and fireproof buildings, where we can have everything we want, the best of floors included, we must have money, and you all know how difficult it is to raise money for hospital work.

Remember that the money for the upkeep of hospitals does not come from the wealthy men of the community. The vast amount in dollars that is spent for maintenance of hospitals throughout the Dominion comes from the people of moderate means. It is the dollars, the fifty-cent pieces and the ten-cent pieces that go to make up the gross totals in money that help to maintain the hospitals of this country. It is all very well to talk about building large and extensive hospitals. Any man can buy a horse and carriage or a motor. It is not the cost of the horse and carriage or motor that makes the pocketbook shrink; it is the maintenance of the vehicles that gets away with the coin. So it is the cost of maintenance of hospitals that piles up debt and keeps hospitals from doing the good work they could do if they were more liberally aided, not only by the people at large, but by the government.

I want also to say that I don't think that I ever listened to better stuff than Dr. Dobbie gave us in his paper. I think that

it is a most valuable addition to the literature of this Association.

As regards fires in the hospitals and the care to be exercised in watching hospitals, I am pretty much of the opinion that the rules we follow in the Hospital for Sick Children is the best way out of the difficulty. We have an inspection of every part of the building every hour from eight p.m. till seven a.m. We have water tanks with pails in every ward. We have hose at each end of every floor in the building, and our nurses are drilled in the use of the hose, and on two occasions our nurses gave most practical exemplification of what they could do in extinguishing a fire.

There is another matter that calls for remark, and it is this: I do not think it is fair to the officers and members of this Association that medical men or laymen should volunteer to write and read papers, and then not put in an appearance. They might at least write the paper and send it in, but they don't even have the courtesy to send an apology for neglect.

You should see how the officials of the American Hospital Association manage their affairs and their meetings. I attend all their meetings, and always come away surcharged with a lot of valuable information, opinions of the best men, experienced in hospital work, who know what they are talking about. These meetings are most interesting and most helpful.

A reference was made as to the accounting in hospitals. I think a lot of time and money is wasted in many of these accounting systems. The simpler the system the better. Our methods are very simple. True, we only handle about $100,000 a year, but even if it were double I think our system of book-keeping would suffice.

Another question discussed to-day is the relation of the trustee of the hospital to the hospital. I am not reflecting on any board of trustees, but I tell you the Lord looks after those who look after themselves. My experience in hospital work is that almost the entire responsibility, as far as the trustees are concerned, devolves on one or two to carry the work along. Of course in many hospitals, where they have a score on the board of trustees, days are set apart for visits by the members of the trust, but this procedure is only formal. Perhaps those specified

are on hand. If they are, the walk round is good exercise; if not, why it doesn't make any matter.

There has been reference to friction in connection with the hospital officials and trustees, but I fancy that such conditions do not exist to any large extent. We have never had any friction in our hospital during the thirty odd years I have been connected with it, either as a trustee or chairman of the board.

Dr. Wayne Smith: Is there any compulsory law in regard to isolation in the sanatoria of tuberculosis?

Dr. Kendall: I understand that the death rate from tuberculosis has fallen a very great deal during the past; has been steadily falling in Great Britain and Europe. Through the efforts probably of Lady Aberdeen and her co-workers the death rate is diminishing. We try to get all the cases we can and isolate them in hospitals. It is difficult to get into the homes of many.

Is there any provision made in any of the smaller towns for the care of tubercular patients? Do the smaller hospitals take in these patients? Do they have a separate ward?

Miss Green: We have no place to care for ours other than in the general wards, and we cannot take them in the general wards. It is a live question with us just now.

Mr. Grier: I should like, if I may, in advance of the invitation that I am going to give, to express the pleasure that I have had, in common with others, in listening to very excellent papers in discussion this afternoon.

I want to say to all here that Niagara Falls General Hospital will be greatly pleased, and the superintendent, too, if all those present will pay a visit to our small institution. We shall be very glad to see you all there, and we hope you will come and see what we are doing. I think criticism appears according to the size of the place. In Niagara Falls we know what it is to have criticism.

I do not wish to sit down without saying this, that it has been the greatest possible pleasure to listen to the papers which have been read this afternoon, and it is with no mere conventional talk but with sincerity. I hope you will come to see this little building. That it has succeeded so well is because we have so excellent a superintendent.

EUROPEAN HOSPITAL NOTES*

Dr. J. N. E. Brown, Toronto,
Secretary American Hospital Association.

It was my privilege to spend a part of the last summer, in company with my friend, Mr. Stevens, of Boston, in visiting hospitals in some of the European centres. These included Amsterdam, The Hague, Utrecht, Hamburg, Berlin, Dresden, Vienna, Paris and London. Our President honored me with a request for a few notes and reflections on what I had seen, which I gladly give to the Association.

HOSPITAL SUPPORT.

In Great Britain, where the system of voluntary hospitals has obtained for centuries, continuous urgent appeals for assistance appear in the advertising columns of the daily papers. In response to these appeals reports are published at intervals of moneys received from such sources as Hospital Sunday funds, some big dinner under Royal patronage, or other social function. Once in a while one may read that a hospital has been remembered in the will of some rich old gentleman, who has, perhaps, been unobtrusively visiting the hospital for many years.

In contrast to this precarious system of support, we find that the Continental hospitals depend on the public purse for their maintenance, and are quite independent of the benevolence of wealthy philanthropists.

In Paris hospitals are supported by the city, and are governed by a Board of Charities, which has likewise the supervision of asylums and of poor relief generally.

In Vienna, the hospitals look either to the city, the province or the state for maintenance; and, though for a long time, none of these bodies wanted to shoulder the responsibility, yet the hospitals have been maintained through the aid of one or the other of them.

Hospitals in Holland are similarly supported, but receive in addition a certain income from patients who are able to pay.

Hospitals in Germany are built and supported by the State.

*From the Transactions of the American Hospital Association.

Some of them, the Virchow, for instance, also receive pay from patients.

In America, excepting Pennsylvania and some of the Canadian provinces, not many hospitals receive State aid, as most of you are aware. Here and in Great Britain hospitals are supported mainly by the aristocracy of wealth; on the Continent by the democracy. While in many respects the former are better managed than the latter, yet, I must say, from the point of hospital maintenance, there is no question in my mind that the easier and better method of raising money is to get all you need from all of the people, rather than a part of what you need from a few of the people.

Through the years which shall intervene between the present and the time when that ideal condition is reached, let us be thankful that so many are disposed to give of their means for this purpose.

At the time of our visit to London, a committee from the leading voluntary hospitals of Great Britain was interviewing the Chancellor of the Exchequer and pointing out to him how his Insurance Bill, if passed in the form it then was, would decrease the revenue of the hospitals, and, perhaps necessitate their closing.

The Chancellor's reply was significant: "The Government," said he, "cannot allow the hospitals to be closed."

In view of the fact that 45,000 of the infirm poor in London are supported by taxation, it may not be long until the remaining 10,000 cared for in the voluntary hospitals, are maintained in part or in full at the public expense.

Another result of this paucity of money for the support of voluntary hospitals was impressed on me while being shown through the medical teaching department of one of the large London hospitals. The professor who accompanied me complained that the college authorities had only about one-half the amount of money necessary to carry on up-to-date methods of teaching medical students. Surely the institutions which train the men who are to look after the health of the nation should be kept in the highest state of efficiency, and, hence, should not depend for their support on a comparatively few well-disposed individuals, but upon all the people. The recent report of the

Carnegie Committee would indicate that in the interests of public safety most of the privately supported medical schools in America should be closed. Their existence is a farce and reflects discredit on the medical profession.

Let us look at Germany.

In the large teaching hospitals, not only does the State supply a full equipment for the care of the sick, but also for the training of medical students. One sees commodious and well-equipped laboratories for chemical, physical, and bacteriological investigation. There is also a full staff of assistants at the command of the investigator, the teacher and the professor. Not only is the condition of the patient elucidated for his own benefit, that he may receive intelligent treatment; but also for the benefit of the coming physicians and surgeons, who will convey the valuable knowledge thus acquired throughout the country.

Do you suppose for a moment that Germany would abandon this great general support of her hospitals and medical colleges and resort to the voluntary system of Great Britain, or the partially voluntary system of America?

HOSPITAL ADMINISTRATION.

It is a common custom in Holland and Germany to have as superintendent or director of a hospital a medical man, who, in addition to his administrative duties, has charge of a clinic as well, or undertakes the specific treatment medically of a certain number of patients. In some instances, we found the director busy with his patients, during which time there appeared to be no one on duty in the head office who could act for him.

In such cases anyone seeking to transact business or confer with the chief executive would be required to wait an undue time.

The writer is of opinion that a medical man, *ceteris paribus,* makes the best sort of director of a large hospital. But, if he is appointed to fill such a position, he should be relieved of work which belongs to the medical staff. The proper administration of a large hospital demands the sole attention of the head. He should not even be required to prescribe for nurses or servants, which duty is sometimes assigned to him. I was told of one administrator who kept a nurse suffering from a sore throat and a

high temperature, on duty for two or three days after the onset of these symptoms. She transmitted diphtheria to several inmates of the hospital, including patients. My informant, a member of the medical staff at the time, stated that the chief officer, though a doctor, had had so little active practise during the twenty-odd years of his administration, that he was not sufficiently alert in the matter of diagnosis, and was no longer *au fait* with the latest ideas and procedure in medical practise.

In a large hospital in a German city, Mr. Stevens, my travelling companion, had asked permission of the director to be allowed to take some photographs of various novel features in the place. The favor being granted, he had reached the kitchen, when he was accosted by a gentleman, who, considerably surprised, inquired what right he had there. Explanations followed, wherein it was learned that the hospital had two directors of equal status, one in charge of the purely medical side of the work, the other, called the technical director, in charge of the kitchen, laundry, engineering, supplies, etc.

It is the opinion of the writer that a hospital, large or small, should have but one head, and that the work of that head in a large hospital should be administrative only.

MEDICAL ORGANIZATION.

There is considerable similarity between the medical organizations of hospitals in Great Britain and those of the United States. In making appointments somewhat the same methods are employed. Able men, who serve without pay, are chosen. There are several seniors of equal status appointed in the chief divisions of medicine and surgery, each of whom is given one or more assistants. House officers are relatively few in number, serve for one or possibly two years and are not paid.

In continental hospitals members of the visiting staff are servants of the State, they are paid for their services and often move from one hospital and teaching centre to another. Each department has one head, unless the hospital is a large one, in which case there may be two clinics in medicine and two in surgery presided over by chiefs of equal status. The other departments—gynecology, obstetrics, etc., have each one head. In the medical and surgical clinic there may be sub-divisions in charge of certain

specialists, who are thus able to make intensive studies of certain diseases. One finds skin and venereal diseases under a separate chief, and the patients suffering from such in a building by themselves.

Separate groups of buildings or portions of buildings are assigned to certain sorts of cases; and much provision is made for laboratory investigation and research in all departments. Laboratories in the medical and surgical departments of the new buildings of the Charity Hospital, Berlin, are constructed as a part of the hospital or ward unit. These large laboratories enable the workers to carry on their bacteriological and chemical investigations in a much more convenient way than when placed in more or less remote buildings. The students are not limited by lack of apparatus and helpers, as was found to be the case in many places in this country by the compilers of the Carnegie report.

The various departments in the German hospitals are well manned with resident medical officers. These men are on salary. They serve three and four years. In some of the hospitals even the chiefs of the departments are resident and paid.

The only hospital in America where I have seen this German method of organization is in the Johns Hopkins Hospital at Baltimore; and, I believe, the work done in that institution during the past fifteen or twenty years has been made possible, to a large extent, by the type of organization, and amply justifies its adoption.

In Great Britain and America the chief interest generally of the head of a hospital service, and of his assistants, is their private practice; hospital work is secondary. In Germany, it is largely the reverse. In America, under present conditions, we cannot expect ideal results. Where a hospital is dependent for its maintenance on voluntary contributions, it has been found prudent for it to have as many friends among the resident medical men of the town or city in which it is located as possible. The larger number of competent medical men that are appointed on its staff, the more private paying patients it will receive, and the easier it will be to keep its revenue on a level with its expenditure. This point was well brought out by Dr. Kavanagh in his paper at the Toronto meeting of this Association.

This is one of the points to be thought of in considering the idea of trying to introduce German methods of medical organization into our American hospitals.

To work out the problems connected with the study of disease and cure, or to supervise their working out, the chief of clinic and his assistants require more time at their disposal than the men in the average American hospital give—more time than they can afford to give. To do this work properly means hours of hard daily labor. Too often, the visit of the hospital physician is a hurried one, and the work of investigating his cases and their management is left in the hands of inexperienced house officers.

The visiting chiefs in all departments should be familiar with all the more recent methods of inquiry and research; and should have a practical knowledge of the technique of all the more common apparatus used in diagnosis and treatment. This is a great strength to a man, particularly if he be a teacher. If he can with facility make a differential blood count, "do a Wassermann, or Widal," make a lumbar puncture and intelligibly examine the fluid withdrawn, analyze stomach contents, determine the significance of a gross or minute pathological section, use the sphygmomanometer, test electrical reactions, know what he sees through the fluoroscope and has the time and inclination to roll up his sleeves and do them, he is the man who will be of great value to a hospital. That this sort of work is not done in hospitals may not be the fault of the visiting staff. The administration has its part to do. All necessary apparatus for such investigations should be provided; enough skilled assistants and servants should be engaged to do the purely routine, mechanical and clerical work.

These ideal conditions are approached in Germany; but to realize them more nearly in America and Great Britain, I am of opinion that the unitary system of organization should be introduced, providing the hospital has sufficient financial strength to be independent of the favor of its visiting staff.

The best man available should be sought for to direct each of the several services, medical, surgical, gynecological, etc. He should be given or allowed to select first-class assistants. There should be plenty of resident officers, the chiefs of which should be retained at least three years. Men who would be willing to

serve in such work should be allowed a good salary, and permitted, perhaps, to do a certain amount of purely consultant work.

This would raise the status of medical education, the sick would receive much more consideration of their condition, and the people at large would be the benefactors.

HOSPITAL CONSTRUCTION.

The larger hospitals of the Continent may be divided roughly into three classes, in so far as the grouping of buildings is concerned. In the first class you see a large number of low pavilions (chiefly one story) scattered over a large area of ground in the second, a block or blocks of buildings, some three storys in height, completely surrounding a large court, and covering an area considerably smaller than the first sort; while the third consist of a series of detached pavilions, two, three or four storys in height, set more or less regularly, surrounded by lawns and spacious gardens, with plenty of trees and flowers. Examples of the first type are seen at the Eppendorf at Hamburg, and the Virchow in Berlin. The second sort are exemplified by the old municipal hospitals of Paris—the Beaujon, La Charite, La Pitie, and others; the third, by the Charity Hospital, Berlin, the West End Hospital of Charlottenburg, and the new hospital at Rixdorf.

It appears to me that the tendency in Europe is to build the hospitals of to-day of pavilions detached, but nearer together than was the fashion twenty years ago. In America and Great Britain there is more of a tendency to spread out hospital buildings than there was formerly.

(Continued in April issue.)

Society Proceedings

THE AMERICAN HOSPITAL ASSOCIATION

(Continued from February issue.)

ROUND TABLE CONFERENCE FOR SUPERINTENDENTS OF SMALL HOSPITALS.

Administrative.—In a hospital of one hundred beds, which brings better results, having the hospital and training school under one head, or under separate heads?

Several replies were given to this, one of which follows:—

Miss Emma Anderson: Theoretically, perhaps, the assistant should be superintendent of the training school, but the assistant must be practically as good a woman as the one at the head, as she so often has to take the place of the superintendent. It is not easy to get such a woman unless she regards the position as a stepping-stone to a head position in another hospital. That means frequent changes. So I have found it more satisfactory to consider my assistant purely as an assistant, and, although her duties are largely those of a superintendent of nurses, I prefer her to be entitled "assistant superintendent."

How the work of the small hospital business office can be arranged so that the superintendent may occasionally leave the hospital in the evening?

Miss Kraemer: We have a night chief who takes the place of the superintendent at seven o'clock in the evening, which makes it possible for the superintendent to go out every evening if she wants to; but I think in that question the words "in the evening" ought to have been left out. I think the superintendent has a right occasionally to go out during the day; there ought to be somebody to take her place then. We have it so arranged that we can go out, the director of nurses and superintendent taking turns, exactly as the nurses do, unless there are emergencies. We are surely entitled to that. I think we have all gone through the experience of working until three o'clock in the morning, doing the bookkeeping at night and getting up at six o'clock in the morning, but I think that stage is past and no woman who takes charge of a hospital has any right to work such long hours, it means a broken down system.

Supervision of Internes.

Dr. Bruce Smith: I think no matter how young the lady superintendent is, she is able to exercise control over the interne if the interne is at all fit to be appointed to that position. A few weeks ago I was asking a lady superintendent—I do not see her here to-night—" How do you manage your internes under this head of discipline, how do you prevent their flirting with your nurses?" She said, " I take every interne into the office when he comes on duty, I show him my hand, and I tell him that there is the only hand that is allowed to be held here."

The wisdom of allowing patients' friends to spend the night in the hospital because the patient is nervous or objects to being left alone.

Miss Lightburn: If there is a vacant room in the hospital and the friends choose to take it at the rate we charge a patient and we do not need the room, they may have it. That often discourages them from staying. With children we do permit one parent or relative always; in that case we provide a cot, charging extra, but we do not allow them to stay just from mere fancy. We charge the regular rates for meals.

Miss Anderson: My experience has been the reverse of that of the speakers. I have never refused patients' friends a cot if they required one. If the patient was nervous, I found it helped the patient, especially before an operation. I do not know of anything that would tend to take away the terror that most people have of hospitals than this one thing. They dread to leave their home and their family, and if we can make the hospital into a home, then I think we have done a great benefit to the medical profession, because while we cannot turn a home into a hospital, we can turn a hospital into a home. I think I have made more friends for my hospital in that way than in any other.

Admitting delirium tremens cases to the ward with other patients.

Mr. Souder: We have had cases where the patrol wagon brings in violent cases, which sometimes take two internes to hold them down. It is dangerous for the nurse, because, unless they are strapped to the bed, they are apt, as they often do, to strike a nurse. We will not admit them into our public ward outside of the accident ward. If we have no bed in the accident ward, we

will put a cot in there. There is hardly a week that somebody is not brought in bordering on delirium tremens by the police, who do not want to take them to the patrol stations. That is one of the questions that our hospital has a great deal of trouble with. When the ambulance brings in cases of people who are amply able to pay, whom the doctors want to get off their hands, we will not take those cases, except in a private room under their own physician and trained nurse.

Should the hospital bookkeeper be expected to do her work in the general office?

Miss Beatty: Our bookkeeper has a separate office and our bookkeeping is done there. We have a financial manager who is assistant to the treasurer. I admit the patients in my office and then the financial arrangements are made in the bookkeeper's office, she receives all the money. This financial manager spends half the day in planning the business of the office and he has an assistant who attends to all the details. This arrangement has been in force the last three months. Previous to that time we had a bookkeeper who attended to the telephone and assisted the medical directors, but we found there was too much detail imposed on her; so our Finance Committee decided she had more than she ought to do and they relieved her of some of her duties. She makes a statement from time to time as requested.

Wanted—a formula for securing loyalty from heads of departments.

Dr. Morrill: If the head superintendent is disloyal to the department heads, he can expect but disloyalty from them; if he is loyal to them, he can expect nothing but loyalty. If you undertake to run your place with military discipline, you must expect your subordinates to try all the military dodges. You cannot expect any more than you give. Those are generalities, but, to be specific, if you go to a ward and give your orders direct to a nurse of that ward, ignoring the head nurse, the head nurse will immediately look out for herself, and you started it.

Providing applicants are of equal intelligence, whether it is better to employ graduates of one's own school for official positions, or graduates of other schools.

(a) Which is preferable, a graduate head nurse or a third-year pupil in charge? (b) Is the third-year pupil in charge able

to assume necessary responsibility? (c) Which is more loyal, the graduate head nurse or the third-year pupil in charge?

Miss Aikens: In regard to the first question, if I had been asked that question a number of years ago, I should have said without hesitation that preference should be given to our own graduates every time, but a few years' experience teaches us quite a few things, and I am sure it is not a question that can be answered by yes or no. The question of the head nurse is entirely one of intelligence, in the first place, I believe the disposition of the individual has greatly to do with it. I think we are all rather prone to get into ruts and follow the course of least resistance. We all appreciate the comfort it is to have a nurse that has our way of doing things in the institution, and can get along without so much breaking in as a new head nurse from another school, and yet I am very sure it is not a good thing for hospitals generally to settle down to the idea that the head nurses should be their own graduates entirely. I think that where there are several head nurses to employ a mixture is a pretty good thing, and I believe on the whole that it is a pretty good thing before putting a graduate nurse in an executive position in the hospital where she was trained, to put her somewhere else for about six months, to get her rid of a lot of little petty prejudices that she is apt to have, and she will come back to us broader and better than she would be upon stepping into a position immediately after graduating. The question of graduate nurse or a third-year pupil in charge is another question that I do not believe a fixed answer can be given to. My own preference in every case would be to have a trained head nurse at the head of the department rather than a pupil nurse, because I believe our head nurses are being depended on more and more for teaching, and I believe we turn out better trained nurses if we have permanent head nurses in charge of our wards. The pupil nurse lacks accumulated experience, and it is a question whether there is half as much economy in it as we are inclined to think, because a pupil nurse certainly cannot enforce discipline and economy with the same authority that a graduate nurse can.

(a) Methods which have proved successful in dealing with destructive and wasteful nurses. (b) Should pupil nurses pay for articles broken or destroyed?

Dr. Howell: I should say it is very much to the nurse's advantage if she simply pays for the things that she breaks. It teaches her the cost of things. When she once knows the cost she is much more apt to be careful than if she can use any amount she wants.

The Chairman: I think there are a great many of us that agree with Dr. Howell, that it is the surest way of teaching nurses, even though it is hard at the time.

Need of a system for keeping a record of practical work done by pupil nurses in the wards.

Miss Lightburn: In our school, we keep track of everything she tries to do, and we try to provide time to have it include everything that she may be called upon to do, and in that way keep one record as to what she has been shown and taught how to do. This record is kept on a card first and then copied into a book.

Who has a successful method of disciplining pupils? The social side of training school life.

Miss Hall (Seattle): It has been my experience that in the majority of instances, as soon as a young woman enters the training school, even on probation, there is a certain restraint, she begins to lose her individuality, and I think we have been making mistakes. I think in order to develop the very highest type of woman, the highest type of nurse, we need a good full free expression of life, and we get that best without a very great deal of restraint. To give you a little of my own personal experience, I have at present a school of sixty. I begin with probationers as soon as they enter, and first of all we consider the sacredness of our work. Then, just as soon as it is practical, they are taught to understand something of the hospital management, what the hospital depends on for its maintenance, and they get a personal interest in the institution. Then as we get along a little further, we have a course of inspection of the hospital and we invite criticism, we invite suggestion. We are not a perfect institution, we are very defective in construction. As a rule what the nurses see is considerably at variance with the theory. We do not want them to think that we think we are perfect, and when we get them to come to us, we get them to be co-partners with us. Then we have

our class organization, each class is organized with its regular officers, and I want to say, each class very jealously guards its own interests, and the question of discipline is settled for me in that way. Each class has its method of entertaining, and so on these lines we enjoy a very happy family life without a great deal of disturbance, and there is no question of disloyalty; they are made to feel in connection with the work that any little economy on their part is a direct contribution on their part. In that way they become stockholders or shareholders, and we have no trouble. We have given in connection with our school some time to the development of the spiritual side of the pupil so that we have our regular weekly devotional services. We do not have them in the form of the prayer meeting as we understand it, asking for something. We come together with this understanding: that we are happy and have praise and thanksgiving for the privileges we enjoy. The nurses join in that way and they do not rebel, they come voluntarily and gladly, and we have thought that that largely assisted us in our work.

Miss Grace E. McCullough, Dietitian, Massachusetts General Hospital, Boston, Mass., read a paper on "Some Problems in the Dietary Department of Hospitals."

Many new buildings used for dietary purposes are as faulty in construction as the very old ones. May I be pardoned if I draw upon my experience and observations? I know of one hospital with a census averaging between 800 and 900, where the kitchen is ideally located on the upper floor, without one drop of hot water at the faucets from 9 a.m. to 4 p.m. Can you estimate in dollars and cents the friction of the grumbling and snarling of help and the waste of time to heat water for the washing and cooking of food for such a large number?

To be a success in the work, the dietitian must be an all-round woman, with technical training and as much as she can get. To be equal to the practical side she must have great executive ability, an abnormal amount of common sense, tact, infinite patience, and excellent health; she must be able to satisfy her large family, and at the same time maintain an economic standard. She must be a teacher, for connected with all hospitals of any size, are the training schools for nurses, with courses in dietetics and special diet kitchen, where up-to-date methods in

determining the value of foods from caloric, nutritive and digestive standpoints are carried out. Last, and certainly not least in importance, is the ability to render intelligent assistance in the diet of diseases, especially those of the gastro-intestinal tract, where diet is the primary treatment and in the diseases of infancy.

Nothing but the best should be purchased; it is cheapest in the long run. Shall the hospital purchase by contract, or upon the open market at wholesale, plus a cash discount? Shall the institution, if large, have a purveyor or will the Superintendent, dietitian or steward do it? In any case the quantity and price should be the prerogative of the dietitian to control, as she is responsible for the per capita cost of sustenance.

Waste.—The waste problem can be traced to three distinct channels—

I.—Unsatisfactory providing.

II.—Improper serving.

III.—A lack of care in the left-over.

Needing eternal vigilance from the beginning to the end. Where must the responsibility be placed? Unquestionably, upon the dietitian, by supervision, through her enforce upon each department of the hospital handling food. With a careful inspection of the garbage pail, such as the admirable system in use in the Massachusetts General Hospital. (See Dr. Howland's Pamphlet.)

We find included within the dietary department of the general hospital separate and distinct sections, correlated into a composite whole. The well to be fed equally with the sick. The special case demanding comprehensive work and a diet laboratory. The feeding of and for the doctors, their idiosyncrasies and those of their patients. The training of the nurses along progressive lines as well as proper food to maintain the standard of duty demanded, and last, from the depths of my heart affirm not the least or the easiest, the feeding of that large army of employees required to make possible the manipulation of such intricate machinery. No cut-and-dried methods any more than rules can be formulated to meet the needs of all institutions. The best results can only be obtained when the department is con-

trolled by a suitable head, with adaptability sufficient to apply the best from all available sources to improve conditions.

QUESTION DRAWER.

Has any member of the Association had practical experience with linoleum floors?

Dr. Howard: I do not know that any of our hospital men have had long enough experience with linoleum floors except on the continent. I know what they mean exactly when they talk about foot prints on linoleum floors. When they make this linoleum, the last thing they do is to work up a finish on the top. Until that finish has been worn for a while, it seems to show every track easily. There is an English linoleum that is made by a good firm, probably as good as any linoleum made, and it is always made without that high polished finish, the same on the 16-millionth part of an inch on the surface as it is clear through, and it does not show tracks, either. Why the ordinary linoleum people put this finish on the top of it I cannot quite understand. The linoleum people put down a little piece for me recently and accidentally overturned the cement on the linoleum as they put it down—I always use linoleum cemented down—and in cleaning up the cement they used a little wood alcohol and the wood alcohol took off this polished surface, and they kept sending in bills and I kept sending in word that I should like to have the linoleum put in good shape, and it finally resulted in a long letter, and they said, of course, that the surface could not be restored; they would do the best they could do and they tried to remedy it. It was a foolish piece of business from the hospital standpoint and everybody's standpoint. If you buy English linoleum, it is the same clear through and you will not have any trouble.

Dr. Ancker: I suppose I will be put down as a disagreeable person, but I am opposed to anything of that kind on a hospital floor. We have had very considerable experience with hospital floors; we have tile floors and we have maple floors, our maple floors are highly polished and almost seamless, that is, as far as any seam that would carry dirt is concerned. I have never known anybody to fall on those highly polished floors, and they always look beautiful, and I have never heard anybody complain

of the noise. I have always maintained that the proper floor for a hospital ward is the tile floor; it is incomparably, I believe, the best floor that is used. As for being hard on the nurse's feet, or making a noise, I do not think that is true. We have many thousand feet of this flint tile, the hardest tile that is made, this imported material, and we have never had any complaint about the noise, and it is so easily cleaned with a rag and a little soap. In laying your linoleum you have got to have the foundation perfectly smooth and level, then you have got to have a perfect cohesion; I mean by that you have got to have the material used in cementing so distributed that there will be perfect cohesion, otherwise water will get underneath. Another thing, linoleum is a quarter-inch thick, and surely you are going to have an accumulation of dirt on the other side. In some of our corridors we use grass twine rugs or runners, and they are easily cleaned with a vacuum cleaner or put out of doors. I certainly do not care for linoleum floors.

Please state the best treatment of hardwood floor when an oil finish or wax are not to be used?

Mr. Gill: In regard to washing floors, we do not feel that it is necessary to wash the floors more than three or four times a year, then we wash them thoroughly with lye and hot water, take all the old wax off, then we immediately start to waxing again and polish daily with a weighted brush.

What has been your experience with a motor ambulance, first, gasoline; second, electric?

Rev. Dr. Steen (Philadelphia): The Presbyterian Hospital in Philadelphia has had an electric ambulance for a little more than a year. The first year and a half, rather more than that, we had a great deal of trouble from the fact that we had no battery in reserve, and if our ambulance came in with the voltage run down we sometimes had to delay unduly in answering calls. We, two months ago, solved that difficulty to a great extent by having our old battery thoroughly overhauled and put in order; that is the condition under which we have been working the past few months and the improvement has been great. It has given in general good satisfaction. As to what the comparative expense between that and the horse ambulance is, taking all things into consideration, I am not able to say at the present time, but I think, all

things considered, the electric ambulance has not been a greater expense than the horse engine.

What stand does the A. H. A. take in regard to the request of local physicians to have all hospitals receiving state aid open institutions, so that each physician can treat his own patients in the hospital? (In our town there are from 50 to 60 physicians, and it could happen that on one day 55 different physicians would have as many or more patients in the hospital.)

Dr. Kavanagh: I do not know what this Association would say about it. I only know that I do not know quite what one member would say about it. I have a great deal of sympathy with the practicing physicians in the neighborhood having some chance to take care of a certain run of patients in the hospital, but as to opening the wards, I think that would mean very great confusion and be practically impossible in order to get good service. If you start that sort of thing you get the Sage foundation after you. That is all I know about that.

Would not proper co-operation between Superintendents in the same town or city, meeting regularly for the purpose of discussing and obtaining good quality and reasonable prices of hospital supplies, and employing one special clerk for the purpose of obtaining and tabulating pertinent information—be as efficacious and infinitely less expensive than the purchasing bureau now existing in New York.

Mr. O'Brien: I do not doubt, Mr. Chairman, but what hospital superintendents could get together and have their work done much cheaper than it has been done by the bureau in New York. I would like to state how the bureau in New York was organized. The superintendents of twelve hospitals came together and appointed six of the number as a committee who meet together as often as necessary to take care of this work. That committee found it necessary to employ more than a clerk and also found it necessary to rent office space in which to do the work. It may be true that this committee has been extravagant and that other hospital superintendents getting together can do much better, but I speak on behalf of our organization. I can name twelve private charity hospitals in this city, if they should come into the bureau at this time it would make the expenses of the bureau for the institution with which I am connected about

$300, that means above the expenses of an office boy, about $25.00 a month. If I can have the services of six hospital superintendents, one capable purchasing agent who must have had considerable experience in the market, and as many stenographers as may be necessary to carry on the work, for $25 a month to be relieved of all the care of selecting materials and being sure that I am having the right price, I think it is of great advantage to belong to the bureau.

What consideration do you give graduate nurses of other training schools or hospitals than your own when they enter as patients, either medical or surgical?

Dr. Kavanagh: We are accustomed to treat the graduate nurses of other schools as we do the physicians not members of our staff. We allow all physicians a discount of 25 per cent., and we allow all graduate nurses of other institutions 25 per cent., if they can pay it, and if they cannot, why, we try to treat them somewhere along the point of their ability. As to our own graduate nurses, we have cared for them always in what we call semi-private accommodation, in rooms with two beds. We make no charge for them there, or for ministers and their families, or for deaconesses; we make no charge in that semi-private accommodation. According to our rules, if they insist on getting a room by themselves, then we expect that they will pay one-half, which they do not very often do.

We have numerous complaints about patients being awakened too early in the morning. Is it possible, or desirable, to have a fixed hour before which night nurses may not be allowed to waken patients in the morning? If so, what hour is best?

Miss Keith: I have heard that complaint, I think, before. In our hospital, the patients in the ward, where there has been but one night nurse on duty during the night, are allowed to sleep as late as possible. The night nurse is required to see that their faces and hands are washed before she goes off duty at 7 o'clock in the morning. That does necessitate their being awakened sometimes about 6 o'clock, or not long after six. On our more expensive private rooms, if they are in their own homes in the habit of sleeping later, their toilet is left entirely to the day nurse, who comes on later, but the class of patients who occupy public wards are, as a rule, in the habit of waking and rising as

early as six, and in our own case we have not had that complaint from them.

Should nurses in training be paid? Is it easier to keep up a full corps of nurses by giving them allowance? What amount is ordinarily given?

Miss Aikens: I do not believe the first question, "Should nurses in training be paid?" will be settled in our generation. I believe it is like a great many other nursing questions that we are struggling with at the present time, they have to go through a process of evolution and settle themselves, and I do not believe this Association or any other association could ever give a satisfactory answer to that question. Institutions vary so greatly, and our conditions vary so greatly, that we simply have to meet the problems patiently as they arise, as the physician does his symptoms. I was trained in a hospital which gave an allowance, and I remember that allowance was quite a satisfaction to me. I had gone into training rather against the wishes of my parents, as a great many girls had done. I awfully hated to send home for money, and it was a great deal more gratification to spend that money myself to pay for my own uniforms and books, than to have the uniforms and books given to me, and I think there are a great many other girls similarly situated.

As to the second, "Is it easier to keep up a full corps of nurses by giving them allowance?" I think unquestionably it is. I know of an institution of about 300 beds which a few years ago decided on a change of policy and decided they would abolish the allowance. It proved so disastrous to their training school that they did not recover from it for a couple of years; the ranks became so depleted, the patients were neglected and the whole institution got a bad reputation for neglect. If I remember correctly, the superintendent of nurses told me that they did not get one application in six months, so they never put the rule into operation. She told me at that time she was running with 35 less nurses than her regular staff, and trying to struggle with the problems as they arose; so I think that any institution that would be considering at this particular period at which we live abolishing the allowance after they had been allowing it, would have considerable difficulty. I think a new school starting would find it much easier to give an allowance. Where paid instructors are

allowed and where pupils are helped through a period of preliminary training, superintendents feel that they should not pay pupils an allowance in addition to that, and I sympathize with the superintendents in that position, and yet those conditions do not prevail in hospitals in general as much as they should.

How store milk for a hospital of 100 beds?

Miss McCullough: I think all hospitals, when it is possible, should have their milk brought to them in bottles. In a hospital of 100 beds it seems to be a question of what to do with so many bottles. I have in mind a little scheme that I may be able to patent before long, if I get the opportunity, in which we can put the bottles in racks in a zinc arrangement and have these baskets to go up and down on a cog wheel arrangement. In it we can put any number of bottles and it can go up the side to the ceiling, and as each basket is drawn up the thing will go around and around. I am sure we could store milk for 300 beds in that way; it would not take up very much room, and in that machine we would have some arrangement that would keep it at the proper temperature. That would do away with emptying the milk from the large cylinders which are brought to us by the railroads. It could be carried to the ward and kept in bottles until it is used. Much milk as it is poured out receives infection. In this way we can keep the milk in a good condition. I am sure that there is very little expense in a hospital having a refrigerator plant; even with only 50 pounds of ice a day or with an ammonia coil or a CO_2 coil. I am safe to say, 200 quarts of milk could be stored, and that milk could be taken in the bottle to the ward and placed in the refrigerator, whatever it may be and emptied from the bottle into the glass of the patient. It seems to me very plausible and very possible for that to be done.

Dr. A. S. Kavanagh, Superintendent of the Methodist Episcopal Hospital, Brooklyn, N.Y., presented the Report of the Committee on Hospital Efficiency, Hospital Finance and Economics of Administration, which appears elsewhere in this number.

The Committee on Time and Place of Meeting recommended that this Association meet Sept. 24, 25, 26, and 27, in the City of Detroit, Michigan. The report of the Committee was adopted.

The Committee on Nominations recommended the appointment of the following officers for the ensuing year:—

President—Henry M. Hurd, M.D., Secretary of the Board of Trustees, Johns Hopkins Hospital, Baltimore.

Vice-Presidents—A. J. Ranney, M.D., Superintendent The Lakeside Hospital, Cleveland, O.; J. L. Hudson, Esq., President Board of Trustees, Harper Hospital, Detroit, Mich.; Miss Nancy P. Ellicott, Superintendent of the Rockefeller Hospital, New York City.

Secretary—J. N. E. Brown, M.B., 90 Charles St., Toronto, Canada.

Treasurer—Asa Bacon, Esq., Superintendent The Presbyterian Hospital, Chicago.

Report adopted.

Through the untiring efforts of Miss Charlotte Aikens there was displayed an immense number of non-commercial exhibits, a study of which was sufficient alone to repay a visit to the Association.

THE AMERICAN HOSPITAL ASSOCIATION.

Next Meeting, Detroit Mich., Sept. 24th, 25th, 26th, 27th, 1912.

ITS WORK AND ITS AIMS.

The American Hospital Association is composed of hospital trustees, managers, trustees, contributors and officers of associations founded to promote the interests of organized medical charities. It aims to promote economy and efficiency in hospital management, to educate the public regarding hospital needs, to disseminate information regarding every phase of hospital work, to assist those who are carrying hospital burdens, and in every possible way, to improve the care of the sick.

During the dozen or more years of its existence, it has given much study to hospital construction, called attention to defects and mistakes, pointed out causes of difficulties and methods of improvement, thereby rendering a distinct service to hospitals recently constructed, and to the hospitals of the future.

It has devoted time and earnest thought to improving methods of bookkeeping and accounting for hospitals, and has recom-

mended a system of uniform accounting and reporting applicable alike to larger and smaller hospitals, thus aiding materially in bringing about more systematic and business methods in its own particular field.

Keeping in view the interests and needs of hospitals of varied sizes and conditions, of the nurses, and of the public, it has given a serious and prolonged study to the training of nurses, and has recommended a course of training which has been adopted by large numbers of hospitals in the United States and Canada, thus doing much to standardize the work of that important department, and render it more efficient.

Questions regarding hospital finance, and prevention of waste, medical organization, management of infectious diseases, the out-patient department, social service, municipal needs and policies relating to the care of the sick, hospital dietaries, the best method of purchasing, the training of superintendents and heads of departments, hospital accidents, and a great variety of similar practical subjects, important to all hospitals, have been discussed, so that the experience of one hospital might be made known and used for the benefit of all.

The American Hospital Association welcomes to its membership and councils, the representatives and supporters of the smallest hospitals, as well as those of larger institutions. It needs their support and assistance, and invites the active co-operation of every hospital in the United States and Canada.

Believing that the establishment of a central bureau of hospital information in which would be filed plans and information regarding construction and every phase of hospital information, would be a distinct help and benefit to hospitals in general, the American Hospital Association has committed itself to that object and is now working diligently to that end. The addition of several hundred new members to the already large and growing list is necessary before the important object can be realized.

Every member of the Association can help bring the goal of the hospital worker's ambition one step nearer, by securing annually one or more members for the Association.

You are earnestly invited to assist in this undertaking to co-operate in promoting the usefulness and general welfare of

the organization and to participate in the benefits to be derived by becoming a member of the American Hospital Association. Those who can not take an active part in the work the Association is doing, can greatly assist by retaining their membership by payment of the annual fee, giving the Association the benefit of their name and influence.

Copies of this leaflet and application forms for membership may be had by addressing the Secretary, Dr. J. N. E. Brown, Toronto, Canada.

THE CANADIAN HOSPITAL ASSOCIATION

(Continued from our January number.)

Mr. C. W. Williams, of Boston, presented a paper on heating and ventilation of So-called Smaller Hospitals.

Mr. Williams said in part:

Some fourteen years ago the writer was called in consultation regarding a large undertaking of engineering problems connected with many changes and enlargements to be made in one of Massachusetts' oldest and best known hospitals. Up to that time I had known very little about hospital practice or needs along engineering lines, although having to do with such problems in other buildings and institutions for several years. In accepting this responsibility, I agreed to live in the institution while the work was going on and did so for eight years, having full charge of not only the installation of all new apparatus called for in buildings erected, but also seeing that the entire mechanical systems in the old buildings should be maintained and kept in proper running condition. I wish here to assure you that this gave me an opportunity to study hospital needs and requirements from an engineer's standpoint, such as could never have been obtained outside. When new buildings were completed in connection with this work, I found myself deeply interested in hospital problems and immediately began to study hospital requirements, leading up to the fact that in the past six years I have had to do with something over thirty engineering problems in as many hospitals throughout the United States and Canada.

Probably three-fourths of the institutions have been the fifty, seventy-five or one hundred bed hospitals and I must simply give you my experience and knowledge in fitting up these buildings and to quite an extent looking after them to see that best results are obtained from the systems installed.

This experience has first taught me that the ideal heating or power plant for so-called small hospitals is one located *apart* from the Administration or Ward Buildings. It may be combined with the laundry and should have, in connection with it, a workshop; suitable lockers should be provided with miscellaneous supplies such as valves, pipe fittings, etc.

In many small hospitals it has often been the practice to place the boilers in the basement of one of the main hospital buildings, where the delivery of coal is a noisy and dirty nuisance. The removal of ashes from such a location is often difficult and a menace to patients or others connected with the building.

Again, the experience of these years has also shown me that the question of the most satisfactory system for heat, light and power in smaller hospitals has long been a problem troubling many engineers, and only a few years ago it was thought out of the question for hospitals of this size to consider a high pressure steam plant for their work; but in these more progressive times when there is a demand for steam all months of the year in every up-to-date hospital, there seems to be only one solution to the question, and that is, to equip the plant at the start with two medium sized high pressure boilers, so that sterilizing, laundry work, ventilating coils and other demands of this nature may be met. The first cost is but little more and in actual practice I have found that the additional cost of maintenance is but slight, if any, when convenience and efficiency are taken into consideration.

With high pressure steam in large or small quantities at hand at all times for the purposes named, an unexpected or unusual demand for steam for heating, as on damp, cold fall days, may be quickly and conveniently met by means of a reducing valve. This convenience is found especially agreeable and desirable in operative rooms.

It is but natural that the first question asked by the management of the smaller hospitals is: "Can we afford to maintain

such a plant the year around?'' Any hospital having from twenty-five to fifty beds cannot afford to constantly use fuel under their boilers and in addition pay a large sum of money monthly for electric current amounting to nearly five per cent. per annum on fifty or seventy-five thousand dollars, where an investment of a few thousand dollars would bring them much more satisfactory results at a less expenditure.

The exhaust steam is always available in mild weather, spring and fall, also damp days in the summer months. The efficiency of the hospital is also benefitted, as current can be used much more freely for experimental or illuminating purposes at a very small cost, hardly noticeable after the plant has once been installed.

As to ventilation no better results can be obtained than to adopt plenum chambers and force the tempered air through a series of well-placed ducts to rooms required to be heated. This necessarily requires some mechanical means in the way of fans to deliver the air where required and is often too expensive for small hospitals, both in installation and maintenance. As a substitute to this, I have often found that mixing chambers can be so provided and indirect stacks so arranged that very good results can be obtained in getting the needed warm air to the rooms and also the required air changes, even without inlet fans. This method I have now adopted as the best and most inexpensive for so-called small hospitals. This system is supplemented by direct or direct-indirect radiation in all offices, corridors and other service rooms.

Ventilation, in even a small hospital, should be provided in all rooms where patients are cared for and in service rooms adjoining them. This system should be entirely independent of the heating system and small fans or aspirating coils should be placed at or near the point of exhaust to the atmosphere. Steam coils will do very well in getting good ventilation in small wards or rooms, but fans should be used in large wards of twenty or more beds, and also in connection with operating suite.

DISCUSSION.

Dr. Robertson (of Ottawa): I think that the open windows —the direct ventilation—is the best that can be afforded. Now,

in the Sick Children's Hospital Miss Brent showed me a very neat device by which pure air comes into the ward freely.

Dr. Goldwater, the last time I was at Mount Sinai, showed me a system that cost many thousand dollars. He said, "We would be glad if someone would come and take it away." I am glad that Dr. Smith emphasized that in his paper.

DR. WALKER: It is not many years ago since Dr. Stowe-Gullen told us about the wards in Paris, and that the death rate was something in the neighborhood of fifty per cent. Mr. Robertson is telling you about the Toronto Isolation Hospital. Paris has had its troubles, and Paris is telling us about the box wards. It is because Paris has had this all out, and they have set their money and minds to work, and have got out of the rut. It is like this in this country, I suppose. Architects think they are perfectly able to build a hospital, although they have never been inside of a hospital. The last report that was published by this Association came around to us in Niagara Falls, and was about the first book that I had read on the construction of hospitals, and I am very glad to listen to a report that tells us about the box wards in the Paris Hospital. It won't be long before Niagara Falls must have an isolation hospital of some kind. We would like very much to know how to manage the tuberculosis building and isolation hospital all under one management.

MISS MATHESON: I have listened to the discussion about my hospital. We have had our troubles certainly, and I know I agree with Mr. Robertson that our hospital is very poorly built, and when Dr. Smith spoke of the dangers regarding smallpox, I would a hundred times rather get it into the hospital than measles. I would not expect a death from smallpox, but I would from measles. That box system, with the same nurses attending them from face to face would not suit in Toronto. The people would not be satisfied. One doctor will fancy that we should have a hospital for scarlet fever in one part of the city and one for smallpox in another, and another doctor will come along and treat it in a different order.

MRS. FOURNIER: I am in full accord with what Miss Matheson has said, having had considerable experience with the views and ideas of so many doctors, and also the public. In this country to-day the public is not well enough educated to the idea that

they can get along with all sorts of things under the same roof. I think nurses and doctors who are looking into these matters understand, but a great many doctors who are not taking particular interest along these lines, and a great many of our patrons and families, would certainly object keenly to this arrangement at the present time.

In the contagious hospital in Detroit, where I took my own training, and the hospital where I got my isolation experience, arrangements there satisfied physicians and patients. We did not take any smallpox, except on rare occasions. The Diphtheria was entirely separate from the Scarlet Fever Department and also from the Measles Department. The three were under one roof, and the nurses who cared for scarlet fever cared only for scarlet fever patients. The nurses had a nurses' home. The scarlet fever nurses did not come in contact with the diphtheria nurses. The nurses were kept separate and lived in the house provided for that purpose, and the patients were retained in their own department. No cross-contagion occurred during the entire time of my training that I know of.

Mr. Cole: We are dealing all the time with hospital superintendents and recognized hospital experience in the States. We have a great many new very large hospital problems to solve and have already gone through that question in several cases, and I was a little bit surprised to hear the statement made that we ought to get back to the open window of ventilation. Our knowledge and experience are not only theoretically called to practice. We have hospital buildings of all kinds that are monuments of colossal mistakes, and because of getting the practical experience when these buildings were being built. Theoretically, outdoor air is best, and cold air for some diseases is the only treatment that tells. Take the city of Toronto for example. It is utterly impossible to keep the streets clean. I have had occasion in the last two weeks to inspect air in the air chambers of many of the buildings, with an idea of reporting on the different manufactures of fans, for the Toronto General Hospital, and I was forced to go into the cleaning of these chambers. In several cases I found they were cleaning their air chambers once a week. It was frightful.

The only way to take it in is in such an inlet as to keep it

warm and keep it at a fixed temperature. There are two different kinds of ventilation. Exhaust ventilation, which I find is the only kind some people consider—the removing of foul air from the rooms—that is one kind, but it is only half of the ventilation of the building. The introducing of fresh air is just as important as exhausting. The only successful way that has ever been available is to take it in from private inlets, steam coils, with the necessary humidity device, and the cost of instalment is quite small.

I do not pretend to know about the question of infection, but if there is any question of air being infectious, there is only one thing that can be done. That is, to keep the air until you can do away with it.

The question of the doctor and engineer working together; that means the superintendent of the hospital and the physicians, who have the interests of the hospital at heart, and the nurses who have charge of any particular department—they are the ones who know their needs and know how to tell what they want—and the engineer, who has trained knowledge of every particular, the specialist, talking with them and diagnosing their cases, can best apply remedy. One gentleman said to-night that architects sometimes had never seen the inside of a hospital, yet were always prepared to build the hospital. That is true, but he is always ready to get a specialist for you. At the same time the engineer finds it almost impossible to give the higher efficiency of service without coming directly in contact with the hospital superintendent, hospital doctor and hospital nurses. The only way that we can give you what you need is to either talk with you through the architects, or to work with you direct, in order that we may know just what particular design best meets that need. In no other way can you control and guarantee the quality of the air supply that your patients breathe than by mechanical ventilation.

Dr. Walker: I wonder whether the superintendents of Ontario have ever considered that the subject of the number of days' stay in the hospital is in relation to their ventilation system. I know that in our small hospital here we have some kind of ventilation system, and I know that they pump fresh air that has been warmed. We keep an average of about sixteen days for our patients, and running over some of the other hospitals I

notice that the number of days' stay varies considerably, and I thought we were getting in a perfectly good class when we got the same number of days as they do in the General Hospital in Toronto. That is one finger which might be an index of the proper system of ventilation in the hospital.

Mr. Hewson: I was just wondering, going through this discussion, if it would be possible for Mr. Cole to give a slight approximate figure as to what it would cost to put in a separate heating plant for the small hospital that we have here, one that would do for the nurses' home, and large enough to take care of other buildings that will be put up later on. That question was brought up at a late meeting of the Board.

Mr. Cole: I would have to look over conditions and see what you need.

A report was read from the committee appointed to consider the question of the amalgamation of the Canadian Hospital Association and the Training School Superintendents' Association. No action was taken, but it was decided that the committee draft a constitution to suit the amalgamated body and present the same at the next annual meeting.

The following report of the Nominating Committee was adopted:—

President—Dr. H. A. Boyce, Kingston.
1st Vice-President—Miss M. J. Morton, Collingwood.
2nd Vice-President—Miss Green.
3rd Vice-President—Dr. Lincoln.
4th Vice-President—Miss Rogers.
Secretary—Dr. J. N. E. Brown.
Treasurer—Miss Matheson.

Dr. H. A. Boyce read a paper prepared by Mr. Bailey B. Burritt, of New York, on "The Relation of Hospitals to Other Charitable Institutions." Mr. Burritt said in part:—

There is one other possible line of co-operation that, in the judgment of the writer, has great possibilities. I refer to the possibility on the part of hospitals of utilizing the Associated Charities of the community, as a medium of expressing to the public the need of additional hospital facilities, and the need of supporting existing hospitals in such a manner that they may be able to do this work efficiently. Through its knowledge of the

poor families of the community, it is in a position to speak authoritatively to the press, and to the public on the question of the "undone work" of the hospitals of the community. It is a part of its legitimate work to bring home to the consciousness of the people of the community the fact that the welfare of the community demands that its citizens be given an opportunity to secure a rapid cure and restoration to health, whenever they may have become incapacitated because of disease or sickness. It is their function to tell the community that its own welfare demands that it provide sufficient hospital facilities so that no man, woman or child in the community need go without hospital care when in need of it. It should emphasize to the community that free health is quite as logical and quite as necessary for the welfare of the community as free education. It is in a position to demonstrate to the community that poor families are in danger of becoming permanent charges upon the public, if needed hospital care is not provided. It can drive this truth home by concrete examples drawn from its own experience in a way which it is impossible for the hospitals to do. The associated charities, if it performs its function well, becomes, therefore, a great aid to the hospitals in educating the public to the need of supporting adequately the hospital work of the community.

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If the hospital superintendent and the trustees of the hospital are not closely in touch with the various charitable agencies of the community, and if the executives of the charitable societies are not well acquainted with the hospital superintendent, then neither the hospital nor the charitable societies are performing completely their function in the community. The best interests of the hospital demand such co-operation; the associated or other charities cannot do their best work without it; the patient of the hospital is greatly benefited by it; the welfare of the whole community is improved where it exists. Let there be co-operation.

The next paper on the programme was by Miss Margaret T. Conroy, of Boston, entitled "The Duty of the Training School to the Pupil Nurse." This appears in full in another column.

Dr. J. S. Hart read a paper entitled "What the Average Man Expects of the Hospital." This appeared *in extenso* in our January number.

DISCUSSION.

Dr. Dobbie: Perhaps I may be permitted to say just in a word how much I appreciated listening to the excellent paper by Dr. Hart. In the institution with which I am connected we receive patients from a great many different physicians, and I am quite sure that we always look for and appreciate the co-operation and interest of the patients' family physicians, and it is always our practice to solicit the confidence of his interest in his patient after he has been given over to our temporary care. I am quite sure that there is no other ground that can reasonably be taken in connection with the matter, and there is no doubt that hospitals from a business standpoint are standing in their own light.

I am quite sure there are none of us if we were ill would care to go through the experience that has been referred to so ably by Dr. Hart of being handed over to strangers bodily to be cared for when we can be cared for just as well by those with whom we are familiar.

Dr. Boyce: I have much pleasure in moving a vote of thanks to the Library Board for the use of this room for the Canadian Hospital Association, and also the local committee for the way in which we have been looked after and entertained through our stay in this beautiful city of Niagara Falls, and I understand that there is more to follow this afternoon. I heartily voice, I am sure, the sentiment of all present when I say that we are profoundly thankful to the local committee for the way in which they have entertained us.

Mr. J. R. Robertson: I second the resolution, and in so doing I would like to say this in reference to the last paper that has been read:—

I think it is one of the most important that has been read before this Association, and I am only sorry that I was not aware of the line the Doctor was taking, because I have at home in my library a paper which I intended to read on the American Hospital Association. I totally disagree with Dr. Hart's opinions in every regard, and I think if this paper came up for discussion in an association like the American Hospital Association he would find that there would be a considerable difference of opinion in

relation to the association of medical men to the hospital. I have much pleasure in seconding Dr. Boyce's resolution.

Dr. Lincoln: *Madam President,* allow me to say a word in connection with the last paper. We people in the West believe in open hospitals. We have tried, tried for a number of years and, therefore, we can speak with some experience as to how that worked out. The hospital with which I am connected has a maximum capacity of about two hundred beds. Every man in the city, if he is a reputable medical man, is allowed all the privileges of the hospital. He attends his case, and we have yet to find any disadvantage. We have yet to find the man who sends a case without sending us a full account of the case previous to entering. I had the privilege a number of years ago to be connected about three years with one of the large eastern hospitals. Now, I understand that the eastern standard of work would be greatly lowered if the hospital were to be open. We find this is not the case. The standard of work done in the Western hospitals is fully as high as that done in the east, and I say again, we are yet to find any disadvantage in this course.

Meeting adjourned.

Hospital Maintenance and Finance

ARE COMPARISONS NECESSARILY ODIOUS?

The editor of this department makes his first official announcement, viz.:

The success of this department will depend more upon the readers than the writer.

This statement is not made for the purpose of avoiding labor or of shirking responsibilities which may have been undertaken —nor is it made for effect, but merely as a plain statement of facts.

The facts are that the department is to concern itself with the business side of hospital life: a side which at first sight lacks charm and is in so many cases a black side—a bugbear.

The Operating Room is always pervaded to an extent greater or less, even to the oldest practitioner with a certain excitement inseparable from any work to which there is so often attached an element of risk.

The Medical Wards have a charm of their own: the satisfaction of seeing malignant symptoms gradually give way to persistent treatment; in the Maternity Ward do we not forget that man is born to sorrow and think rather with Peter Pan that each babe's first laugh breaks into a thousand fairies who bring delight to a thousand children?

No such pleasure envelops the business side which is so frequently regarded as consisting of the drudgery making out bills against patients, the greater drudgery of trying—and so often failing—to collect them from patients who will not, or cannot, pay, and the still more doubtful task of examining the hospital's own bills, which, alas! in so many cases it finds difficulty in paying.

It is our aim, then, to try to instil, if possible, some charm into this business work—to make this valley of dead bones show some life.

Let us remember this, and remember it always, that without

such labor, highest efficiency cannot be obtained and without efficiency there must be waste.

The man whose efforts cause two blades of grass to grow where but one grew before has for long been placed upon a pedestal: personally we do not care for pedestals, but if determined effort and hard study are worth while to increase our hay crop, how much more is it worth while to increase our health crop, and to maintain, say five patients where we maintained but three before.

This then is our object.

The efficient means at our disposal are all embraced in the one word, how too often so lightly used—co-operation.

No one person can lay down the law and tell us now just what to do—if there were, how gladly would we do it. But the needs of an infirmary in Alabama differ from those of a hospital in Canada as much as a Tuskegee differed from a Huron and the present needs of both are far different from those needs of ten years ago or, doubtless, of ten years hence.

We have, however, great faith, almost unlimited faith, in the principle of "getting together"—and here we have our means.

But we can't get together by ourselves—that, at least is clear, and that is the reason why this department will depend upon its readers—upon *you,* dear madam or sir, not the other readers, but you yourself.

Do you ask how we are to get together? The problem may be difficult to solve—but we offer this suggestion, which is the cause of the heading of this column.

We believe that the end we hope for can be approached if we compare our methods and our results, and it is now proposed that, from time to time, this department will suggest certain specific topics for such treatment and will ask its readers to send to the editor any personal experiences or ideas which they may have on that particular subject. They are also asked to suggest suitable topics for discussion.

Any such communications will be treated as the sender may desire, and the name of that sender need not appear in print. The department propose to take such replies, tabulate them, combine them in any manner which appears to give the most profitable result.

As an opening we suggest a reply to the question:

What staff is necessary to properly administer a general hospital of, say, sixty beds having a training school of twenty undergraduates?

Does this require a superintendent, assistant superintendent, superintendent of nurses, operating room nurse, matron, dietarian, bookkeeper and housekeeper? If not, what division of the above offices gives the most efficient and commercial service?

The question is not, perhaps, as easy as it appears, for recently we had occasion to visit two hospitals of this size. In one case we found six employed, in another three—a difference in expense, probably, of about $1,500 a year.

Will you send to the editor your own practice, with an estimate of the actual expense, and the expense you would recommend?

The answers should be specific and detailed—exactness is just as important here as it is in the administration of a drug.

The objects of this are twofold.

1. To inform superintendents what others are doing.

2. To furnish information tending to form a standard which may be accepted by superintendents and by trustees.

The gathering and comparing of such information as is now asked for is responsible for the efficiency of many of our manufacturing plants—let us be guided by their experience and apply their business methods to our own business.

It is hoped that superintendents, physicians and trustees will all take an equal part in this plan—if they will success is assured. W. M.

Hospital Intelligence

UNITED STATES

To Build on a Hill

The State Board of Control has selected Larned as the site of 800 acres for the new State Insane Hospital. It will cost $100,000. There were sixteen towns in the western part of the State competing for the location. Larned is on the Missouri Pacific and Atchison, Topeka and Santa Fe. Practically every foot of the land to be purchased is available for farming, and it will be used for a large farm, as incurable and harmless insane are to be confined there. Open-air work is one of the best possible cures for insanity, and the board expects the new hospital to do much good.

No plans for the buildings have been made. It is settled that the hospital will be built on the cottage plan, with four or five cottages to start it, and additions as needed and without any large buildings, such as are now at the Topeka and Osawatomie institutions.

The new hospital will be erected one and one-half miles west of Larned. It will be built on a high hill overlooking the Arkansas River valley and commanding a view of many miles in all directions.

Hospital Conference

At a meeting of the Executive Committee of the Hospital Conference of the City of New York, held at the Hospital for Ruptured and Crippled, Friday evening, January 12th, the following important resolution was adopted:

Resolved, That the President be authorized to appoint a committee of five (5), who shall act with the President to secure:

(*a*) Either such modification of the Nurse Practice Act or of the regulations adopted by the Education Department under the said Act; or

(*b*) Such interpretation by the Education Department of the existing regulations as shall render it possible for the hos-

pitals of the city to continue the training of nurses in sufficient numbers to meet the public demand for trained nursing service.

The President appointed the following-named Committee:

Dr. C. Irving Fisher, Dr. Thomas Howell, Dr. S. S. Goldwater, Rev. A. S. Kavanagh, Dr. F. A. Brush, Rev. Geo. F. Clover.

OLIVER H. BARTINE,
Sec. Exec. Com., Hospital Conference.

Autograph Album Helpful

The committees of the Woman's Charity Club Hospital of Boston, Mass., are busy. They raised $922 at a fair held in November last.

The autograph album which played such an important part as a feature of the recent fair was placed in the care of Mrs. M. E. Wilson, who was the originator of the idea. Mrs. Wilson announced that, in addition to the names of the prominent men secured previous to the fair, she had obtained the names of Ambassador Curtis Guild, Governor Foss and Lieutenant Governor Frothingham.

Prompt Attention to Patients—Missouri Preparing a New Hospital Bill

Following the investigations of the hospitals of St. Louis by a special investigating committee, a bill is being prepared for presentation to the Legislature, the unusual feature of which is that it proposes three resident physicians for a hospital, who shall be on duty in eight-hour shifts.

New Hospital Burned

The largest of the group of three new buildings of the Talitha Cumi Maternity Hospital of the New England Moral Reform Society on Forest Hills Street, Jamaica Plain, was gutted by fire. The loss is more than $25,000. The building was a three-storey structure of cement and was known as the working department.

Gives Home for a Memorial Hospital

At the recent annual meeting of the Board of Trustees of the New England Hospital for Women and Children it was announced that Miss Alice Stone-Blackwell, editor of the *Woman's Journal,* had given her home in Dorchester, Mass., to the hospital in memory of her parents, Mr. and Mrs. Henry B. Blackwell. The Blackwell home is one of the largest and most delightful in Dorchester.

Down in a Coal Mine—A First-Aid Hospital

At Collinsville, Ill., an underground emergency hospital has been opened in a very large coal mine. The hospital is built in the heart of the mine and is designed to give first aid to the injured.

No Race Suicide Here

A new maternity hospital has been erected in connection with the General Hospital, Clinton, Mass., and is just being opened.

Hospital Ships Needed for the Navy

Surgeon-General Stokes has made the recommendation to the Navy Department that a properly equipped hospital ship be supplied for each of the Navy's fleets. He points out that no community of 14,000 persons ashore would be without a well-appointed hospital, and yet the 14,000 men and officers of the Atlantic fleet have only the inadequate facilities afforded by an old merchant steamer converted into a makeshift hospital. The department is asked to replace this old vessel by a properly equipped hospital boat.

Hospitals Object to Alcohol Fine

Efforts are being made by hospital authorities in Baltimore, in common with hospital officials all over the country, to have the Treasury Department rescind the fines recently imposed for using alcohol and other drugs without paying internal revenue

tax. The fines imposed on Baltimore hospitals amounted to more than $75,000, and the law, if enforced, will become a serious burden to the hospitals. It is said that, in the event of the Treasury Department refusing to have the fines rescinded, bills will be introduced into Congress appropriating to each hospital an amount equivalent to the fine.

Lay Cornerstone for Cancer Hospital

The ceremony of laying the cornerstone for a new St. Rose's Home for Cancer Incurables took place on December 16, Mgr. Joseph E. Mooney, representing Cardinal Farley, conducting the service. The new building is located at Jackson and Front Streets; it will be five storeys high, built of limestone and terra cotta brick with a steel frame, and will cost about $91,000. It will accommodate 100 patients and will be completed by June 1, 1912.

A New Hospital for Red Bank, N.J.

Mrs. Peter Fenelon Collier, the widow of the late publisher of *Colliers' Weekly,* has given $60,000 for a new hospital to be built at Red Bank and to be named the Peter Fenelon Collier Memorial Hospital. The hospital will be non-sectarian and will have an ambulance service.

Lutherans to Build Hospital

The St. Andrew's Hospital Association of Minneapolis has purchased property in that city for a site for a new hospital. The building planned will have accommodations for 100 patients and will cost about $100,000.

An Ounce of Prevention

The New York Evening Globe comments, in part, editorially, on Mrs. Mayer Lehman's gift of $100,000 to Mount Sinai Hospital, New York, as follows:

Her point was that a great deal could be done to relieve the

growing congestion in the hospitals by attacking disease at its source—by going back to the homes and workshops of the poor and treating the conditions causing disease.

Many forms of philanthropic work have some small incidental prophylactic medical effect, but this is the first attempt, apparently, to lead the hospitals into disease prevention on a large scale. Mrs. Lehman's opening of this new field of philanthropy is another illustration of the increasing amount of thought and care given by the rich to their charitable work. Not so very long ago it was almost wholly a question with them of giving the helpless and miserable a few added comforts or saving them from actual starvation.

Nowadays, in purely social philanthropy, the money is coming more and more to be spent in preventing the occurrence of utter helplessness and misery, in efforts to alter the conditions inevitably leading to these social cancers. Mrs. Lehman's gift to the Mount Sinai Hospital raises the hope that medical prophylaxis is to be given the prominence it deserves by the general hospitals.

Mount Sinai Sets the Pace

Mount Sinai Hospital, New York City, has just announced the completion of a fund of $50,000 for the relief of its graduate nurses, who, after twenty years of continuous service, are unable to care for themselves. In certain exceptional cases it is proposed to give relief to those who have served less than twenty years.

War against Tuberculosis

The State of Connecticut has purchased the John E. Post farm as the site for a tuberculosis hospital, the various buildings of which will cost about $60,000.

New Officers

Dr. G. E. G. Kuechle has been elected President of the Milwaukee County Hospital for Insane, and Dr. M. J. White, Medi-

cal Superintendent. The cost of maintenance last year was over $116,000, $80,000 of which will be reimbursed by the State. The recovery rate last year was 31 per cent., the death rate 5 per cent.

What Most Hospitals Need

Architect F. J. Helmle of Brooklyn filed plans for two dormitories which the city will build on Blackwell's Island. The Metropolitan Hospital will have a new four-storey structure for male help 83x33 of the same material as the other buildings and in the same general architectural design. It will cost $100,000. A three-storey dormitory for female help at the City Hospital, 100x32, will cost $50,000. Both will be fireproof.

"Open Up"

At the request of Mayor Mehns of Milwaukee an ordinance is being passed compelling all the hospitals in the city to open their records for public inspection.

The Leaven Working

An active Social Service Department is in operation in connection with the University of Pennsylvania Hospital, Philadelphia, under the headship of Mrs. Helen Glenn. The aim of the department is to act as a general centre from which connections will be established with all other charitable organizations for the betterment of all who come under the direction of the workers.

Fighting Tuberculosis in New York City

A gift of $10,000 from Andrew Carnegie for the new buildings of the Tuberculosis Preventorium for Children at Farmingdale, N.J., on condition that the balance of the $150,000 cost of the buildings which are to be completed next month be raised, was announced at a recent meeting of the Board of Directors of the institution at the Academy of Medicine.

The Preventorium is the first institution of its kind in the United States to do preventive work all the year round in the open air among the children of tuberculous parents and those who have latent tuberculosis or general predisposition to the disease, but who have not developed it. It is a model to show the way for widespread tuberculosis preventive work among children. There are 40,000 children in the city exposed to tuberculous conditions, it is said.

Children between four and 14 years of age are taken from the tenements of New York and sent to the Preventorium at Farmingdale for an average stay of 106 days. These children are found out through the eight or ten principal tuberculosis clinics of the city, chiefly three of the Health Department and the Bellevue, Vanderbilt and St. Luke's clinics, to which the parents of the children have come for treatment.

During their stay at the Preventorium, the children are built up in strength and then returned to their homes, which meanwhile have been improved as to tuberculous conditions through the work of the clinics and the Health Department by the removal of the worst cases to Otisville and other sanitariums and by instruction as to fresh air and cleanly conditions in the home.

Milwaukee Workers

Dr. G. A. Kipke has been appointed President of the Emergency Hospital, Milwaukee, and Dr. C. A. Evans, Chairman of the staff.

An Old Story

The Physicians' Association of Phillipsburg, Easton and vicinity has appointed a committee of seven to devise ways and means for the establishment of another hospital.

Several months ago the Physicians' Association made an appeal to the authorities of the Easton Hospital, asking the privilege of treating and caring for their own patients when they had been admitted to the hospital, providing they paid a fee to the latter institution. Their demand was not recognized at first, and later, when it was given consideration, it met with refusal.

New York Hospitals Filled

The public and private hospitals of New York City are in an overcrowded condition, according to a report by the State Board of Charities. Additional hospital buildings are recommended to meet the increasing demand. The Board says that during the last fiscal year 88,085 patients were cared for in the public hospitals, and 1,669,760 days of treatment were given, while there were 45,489 paying patients in the private hospitals during the same period, in addition to 32,419 free patients and 46,675 public charges.

Trouble in Washington

A meeting of the Committee on Public Health of the Chamber of Commerce, Washington, D.C., was called for the purpose of enabling the committee to ascertain whether it is advisable for the Chamber of Commerce to back the request of the Emergency Hospital directors for an appropriation of $100,000 by Congress for the erection of a new hospital building. No action was taken until more information is forthcoming. The grant is being opposed by other hospitals, who contend that the grant tends to the continuance of a medical monopoly. They want the work.

The New York Post-Graduate Medical School and Hospital

It is announced that the new buildings and laboratory, which have just been completed, were formally opened on the afternoon of January 11, 1912.

Bedlam no More

Dr. Charles Whitney Page contributes an article in a recent number of the *Atlantic Monthly* on the subject "Insanity and Non-Restraint." One of his paragraphs reads:

"In institutional work throughout the United States a determined effort is now on foot to solve the terrible problem of insanity without weapons other than those of kindness, wisdom and

unlimited patience. Already in Scotland the employment of restraint of any kind in the care of the insane is prohibited by law, while in England restraint is strongly discountenanced. In America, New York and Kentucky have adopted advanced legislation on the subject; Massachusetts is following more conservatively in their wake, while much interesting experimentation is being carried on in other parts of the country."

School and Hospital

Detroit, Mich., has just provided for the establishment of a school for tubercular children, run in connection with a hospital, according to an official report received by the United States Bureau of Education yesterday. So far as is known to the Bureau's experts, this is the first school of the kind to be established in the United States.

The founding of the Detroit Hospital School for Tubercular Children is the result of efforts inaugurated by the Detroit Society for the Study and Prevention of Tuberculosis, which was represented before the Detroit Board of Education by Mrs. Herman Dey, Frank B. Lehland and Dr. Herbert M. Rich. The project also had the support of Dr. Guy L. Kiefer, representing the Detroit Board of Health, and of W. C. Martindale, the city superintendent of schools. As a result of their representations the Board of Education agreed to provide a teacher, janitor and furnished schoolroom, with all heat, gas and supplies for running a school at the rear of Grace Hospital.

Fair Weather Christians

Owing to the inclement weather the annual church collections for the Saturday and Sunday Hospital Association in New York were considerably smaller than last year.

Shelling Out

A report from an authentic source says that Alexander Smith Cochran, the carpet manufacturer of Yonkers, N.Y., is to make the city a present of 110 acres of land on Sprain Ridge, in

the eastern outskirts of the city, together with the Sprain Ridge Hospital building for tubercular patients which he erected two years ago. So far he has simply allowed the city the use of the land and the building. The property is valued at $250,000.

Last June Mr. Cochran gave the city five acres of land on Saw Mill River Road for another tuberculosis hospital. Plans are maturing for a $50,000 building on that site.

CANADA

Personal

Edward Fletcher Stevens, of Boston, and Frederick Clare Lee, of Toronto, announce that they have formed a co-partnership, for the practice of architecture, under the name of Stevens and Lee, with offices at 23 Scott Street, Toronto, and will specialize in the design and equipment of hospitals, sanatoria and institutions.

Mr. Stevens, with over twenty years' practice in Boston, has devoted the past fourteen years almost exclusively to hospital planning and consultation.

Mr. Lee has spent the last five years of his practice in Toronto in the planning and construction of hospitals.

Boston Office, 9 Park Street.

Good by Stealth

An anonymous donor has offered £6,000 for enlarging the Royal Hospital for Chest Diseases in London.

Near a Park or Graveyard

"A Heavy Ratepayer," writing to the St. Thomas (Canada) *Times* in reference to a site the city is looking for, says in part:

This seems to me a step in the right direction. The more I think of it the more I am convinced that the Farley property should be purchased for hospital grounds and used to construct any hospitals that we may need for years to come. This property is ideally situated and has ornamental trees and shrubs and is a

very beautiful spot. It seems a mistake to spend $10,000 in two cottages and erect them as it is intended to do, so near the graveyard and without a tree or shrub of any kind, with no more room to build other buildings if needed.

Isolation Hospital for Prince Rupert, B.C.

The City Council of Prince Rupert intend spending, on their temporary Isolation Hospital, a sum in the neighborhood of $5,000. This was at first thought to be excessive, even for Prince Rupert, especially as a large part of the figure is to be spent for plankways to reach the place at a site beyond Hayes' Creek. Some seem to prefer a site along the cemetery road, though one alderman stated that he felt a little creepy about having the hospital "placed half way to the grave."

Isolation Hospital for St. Thomas, Ont.

Considerable discussion seems to be taking place in the City Council of St. Thomas, Ont., regarding the site chosen for the new Isolation Hospital in that town. The City Council seem to be in favor of the Farley property, whereas the Daughters of the Empire seem to lean towards the purchasing of a property in the outskirts of the city. We trust that the matter will be straightened out, and that St. Thomas will be able to boast of a new Isolation Hospital that will be a credit to them.

Nicola, B.C., to the Fore

A fine little hospital, the Nicola Valley Hospital by name, was opened at Merritt, B.C., during the first week in February.

The public wards for both sexes open onto large verandahs, and in each ward will be eight beds for the present.

The lavatories are fitted in the most up-to-date style and the sanitary arrangements are good. The sewage is pumped into a large septic tank 10 ft. by 20 ft. and 17 ft. deep.

Built away from the main building is the isolation ward, where contagious cases will be treated.

This hospital will assuredly compare well with any similar building in the province.

Miss Standish is in charge.

New Hospital for Masset, B.C.

Arrangements are in progress for the construction of a new hospital at Masset. The Natural Resources Company contributed a block of land and subscriptions are being received by Treasurer James Martin. A building of this description is very much needed on the north end of Graham Island, the only refuge for patients having blown down during a recent gale. It is understood that the Government will place a sum in the estimates to assist the energetic committee which has been formed to take charge of the proposed hospital.

Still Another

The new public hospital in Smith's Falls, Ont., will cost $40,000, exclusive of furnishing. It is expected that it will be ready for occupancy in May. About $8,000 of the total cost has yet to be raised.

After the Fire

The proposed hospital for Copper Cliff, Ont., will not be rebuilt at present. The Ontario clubhouse will be turned into a temporary hospital. A large frame building is being erected in front of the clubhouse to serve as a dispensary.

The Growing West

At Calgary, Alta., the Anti-Tuberculosis Society has secured the consent of the mayor to utilize the old Isolation Hospital as a temporary tuberculosis sanitarium, pending the construction of the provincial sanitarium, for which grants have been promised by the Provincial Government and the Alberta Medical Association.

Announcement of this was made on Saturday at the annual meeting of the Canadian Woman's Club by the president, Mrs. C. A. Stuart, following the report of Mrs. Carson, convener of the Sanitarium Committee.

Saskatchewan in the Running

At Weyburn, Saskatchewan, the endorsement by the qualified electors of a by-law authorizing the expenditure of $35,000 for a municipal hospital insures the early construction of that institution. In addition to the sum voted by the payers, the rural municipality of Weyburn will give $10,000 and ten other adjoining municipalities propose giving $5,000 each. An effort will be made locally to raise $15,000 by private subscriptions, giving the fine total of $110,000.

Another Hospital in Toronto the Good

The Englehart Hospital, West Toronto, was reopened on February 8th, a new wing having been added.

Public Funds Forthcoming

A $70,000 hospital building is to be erected in Nelson, B.C., $15,000 being voted out of the public funds.

New Hospital for Regina

The City of Regina will be able to boast before long of a new hospital, the cost of which will amount to somewhere in the neighborhood of $150,000. Over and above the main building there will be a power plant, a laundry and an isolation wing. Dr. Dakin, the new superintendent, and others connected with the Regina General Hospital are quite dissatisfied with their present lack of equipment and accommodation, many patients having to be denied admission owing to want of room. A portion of the old building was some time ago set aside for tuberculosis patients.

Activity in Regina, Canada

Regina's City Council will be asked to furnish the sum of $150,000 to provide for the erection of an additional wing, power plant, and laundry in connection with the General Hospital, the nurses, for the time being, to be accommodated on the first floor of the new wing, and the present Isolation Hospital to be converted into a tuberculosis hospital.

A Good Name

The name of "Hopewell" will be perpetuated in Ottawa (Canada) if a recommendation made by the Board of Health is adopted by the City Council. The Board of Health has decided that the hospital for smallpox patients on Porter's Island shall be called "Hopewell's Hospital."

Hurrah, Hurrah, for Canada

According to Miss Theodora Bean, young women from Canada predominate in training schools for nurses in New York City, and the only trouble is the hospitals can use many times the supply, as the girls are equipped abundantly with the Florence Nightingale sympathy and character. There is a dearth in the nurse output of well-bred girls in the United States, the fad for nursing taken up vigorously by gentle women a few years ago having quite exhausted itself.

A young woman who would then have turned to nursing as a great ambition now finds an outlet in a profession or in the taking up of a trade. So Canada is furnishing what this part of the country once supplied.

The Canadian nurses possess the old ideals of nursing as a woman's mission, an occupation in which she is fortified by gentleness, a desire to comfort and soothe and a sincere sympathy that finds its fullest and best expression in caring for the sick. The New York idea of woman's work has not penetrated their vision or environment.

Here a woman works because she is obliged to live, or works because she has little interest in the simple, natural things of life,

or labors because she thinks it is a penalty she has to pay for the privilege of life.

If a wealthy girl wants to do good, she finances a home for working girls, gives her checks to hospitals, suffrage societies, soldiers' and sailors' homes, takes up settlement work, gives outings to the poor, supplies playgrounds with funds, sends flowers and books to invalids, but she doesn't put on a nurse's cap with the conviction that she will encompass her heart's desire for doing good.

Those less fortunate financially marry or get college degrees and teach or practise a profession; they open tea rooms, intelligence offices, become real estate dealers, bond buyers, buyers for hotels and restaurants, traveling saleswomen, play brokers, bookkeepers, cashiers, bank clerks. Their horizon of labor rarely includes the nurses' training school.

So the town fills up with Canadian nurses every year, and there is room, a welcome and constant employment for all.

The share of nurses supplied by the United States is now largely drawn from those young women who have done domestic service as the girls in the more comfortable places in life have chased off in other vocations or pursuits.

"We cannot get enough Canadian nurses," said Dr. Frederick Brush, superintendent of the New York Post-Graduate Hospital. "We haven't so many enrolled this year as last, but our graduating classes are made up largely of girls from Canada. They still regard Florence Nightingale there as the ideal woman.

"They are faithful in their studies, serious minded, with a clean, healthy humor, void of frivolity. They have no social life here as New York city girls have, and so give all their time to learning."

"Do they remain here after they have been graduated, or do they return to Canada?" was asked.

"No, they stay on in an institution or in private practice," replied the doctor.

"Do many of them marry?"

"I haven't observed that they do until the course is finished. We haven't nurses enough in New York, not nearly enough. The reason is the girls here don't take it up as a fad any longer. When that was the case, when cultured women volunteered to be

trained as nurses, we got the same sort of material we receive now from Canada.

"Our recruits are mostly now in the United States from what is known as the servant class. We train them, and scientifically we get good results, but it is from Canada we learn that Florence Nightingale is a great model and example for all women to-day."

The Margaret Fahnstock Training School for Nurses is a part of the New York Post-Graduate Medical School and Hospital. It gives a three years' course of instruction to women desirous of learning the art of caring for the sick and fitting themselves for holding executive positions in that or other institutions.

The nurses' home is a separate building and is arranged with modern comforts. It has separate bedrooms and a roof garden. An addition is being built now which will contain room for eighty nurses, a tea room, sitting room, class room and an auditorium. Thorough practical experience is obtained in the medical, surgical, gynecological, eye, ear, nose and throat, orthopedic and babies' wards. In addition, there is a three months' course in obstetrical nursing at the Sloane Maternity Hospital, and a three months' course in ophthalmic and aural nursing at the Manhattan Eye and Ear Hospital.

Through a gift of Miss Ellen King, each nurse is given annually a day's outing in the country.

Miss Susan E. Emmott is the superintendent of nurses and Miss Josephine M. Swanson the assistant superintendent. Miss Emmott realizes it is getting more difficult every year to get the attention of the American girl away from the wild chase to business, to clothes, and to luxuries.

Yet she doesn't despair. She believes the same young women are not abandoning the Florence Nightingale tenderness they possess—it is being diverted, that is all, or scattered.

So the Canadian product is ever awaited, joyously met, only there is not enough of it.—The Dawson News.

LIST OE NAMES OF HOSPITALS RECENTLY CONSTRUCTED, UNDER CONSTRUCTION, OR ABOUT TO BE CONSTRUCTED

Alabama—

Eufaula Sanitarium, Eufaula, projected.
Rawls, Gadsden, new.

Canada—

Wellesley, Toronto, new (private).

California—

Diamond Match Co., Sterling City, new.
Southern Pacific Ry., Sacramento, new.
Seaside, Long Beach, new.
Columbia, Los Angeles, new.

District of Columbia—

Emergency, Washington, new.
National Training School for Boys, Washington, new.
Sibley, Washington, new kitchen, dispensary and storage plant.

Florida—

Marion County, Ocala, plans accepted.

Georgia—

City, Augusta, extension.
Augusta Orphan Asylum, Augusta, conversion to hospital.
Davis-Fischer Sanatorium, Atlanta, built.

Illinois—

C. M. Taylor, Bethany, new.
Memorial Institute, Chicago, new.

Indiana—

Robert W. Long, Indianapolis, new.
Dr. F. Dickson, Bluffton, new (private).
Gary, Indianapolis, new.
City, Indianapolis, enlargement.

Iowa—

Dr. Chas. Enfield, Jefferson, new (private).
Illinois Central, Magnolia, proposed.
Sacred Heart, Ft. Madison, new.
Franciscan, Waterloo, new.

Idaho—

Chicago-Milwaukee, St. Marie's, new.

Kentucky—

City, Louisville, renewal.
Wilson, Maysville, operating room.

Louisiana—

Charity, New Orleans, enlargement.

Massachusetts—

Isolation, Springfield, remodelling.
State Psychopathic, Boston, new.
Harvard Memorial Cancer, Boston, new.
Thomas Rotch, Jr., Boston, new (infants).
Children's, Boston, new.
Peter Brigham, Boston, new.
Massachusetts General, Boston, administration building.

Minnesota—

Frederick Levitt, Minneapolis, new (private).
City, Holyoke, addition.
Hale, Haverhill, maternity.

Michigan—

Sisters of Mercy, Ann Arbor, new.
St. Joseph's Menominee, addition.

Minnesota—

Dr. C. J. Wallace, New Duluth, building.
General, Midway, new.
Tuberculosis Sanatorium, Duluth, new.

Missouri—

Levering, Hannibal, nurse's home.
Mineral City Oil and Water Co., Excelsior Springs, projected.

New York State—

Greenpoint, Brooklyn, new site.
N. Y. Post-Graduate, New York, enlargement.
Bellevue, New York, renewal.
Fordham University, New York, new maternity.
McKinley Memorial, New York, projected.
White Plains, White Plains, new.
Mt. Sinai, New York, refrigeration plant.
St. Anthony's, Brooklyn, new.
Trinity, Brooklyn, new (private).
City, Blackwell's Island, addition.
Bushwick, Brooklyn, new site.
New York, New York, new site.
East New York, New York, new site.
Cancer, Buffalo, new.
City, Tarrytown, new.
Lebanon, New York City, new dispensary.

Nebraska—

Mary Lanning Hospital, Hastings, new.

New Mexico—

St. Mary's Roswell, enlarged.

New Hampshire—

Mark Wentworth, Portsmouth, new.

North Carolina—

City, Greenville, new.
Dr. H. F. Long, Statesville, proposed.
Mission, Asheville, new.

North Dakota—

Sisters', Dickinson, finished.
Wittenberg, Williston, new.

Ohio—

St. Elizabeth's, Youngstown, additional building.
City, Coshocton, new.

Oregon—

Sacred Heart, Medford, building.

Oklahoma—

Packington, Oklahoma, proposed.
Good Samaritan, Chickasha, proposed.

Pennsylvania—

West Penn., Pittsburg, new additions.
Dr. A. W. Beatty, Clover, new (private).
General, Brownsville, new.
City, Chambersburg, enlarge.
Pennsylvania Steel Co., Harrisburgh, emergency.
Robert Packer, Sayre, enlarge nurses' home.
State, Shamokin, new.
Contagious, Philadelphia, additions.

South Dakota—

McKennan, Sioux Falls, new.

Texas—

City, Denison, new.
Dr. G. L. Davidson, Wharton, projected.

Tennessee—

St. Joseph, Memphis, enlarged.

Wisconsin—

Infants, Milwaukee, new building.

Wyoming—

Randall Memorial, Lauder, new.

Washington—

Associated Charities (Tuberculosis), Spokane, new.

Virginia—

Tuberculosis Sanatorium, Catawba, enlarged.
Rockingham Memorial, Harrisonburg, additional building.

Vermont—

Mary Fletcher, Burlington, enlargement.

West Virginia—

Dr. H. C. Goings, Matewan, proposed.

Wisconsin—

St. Mary's Hospital, Milwaukee, new psychological building.

NEW HOSPITAL APPLIANCES, PHARMACEUTICAL PREPARATIONS, ETC.*

Hospital Beds

One of the largest manufacturers of brass and iron bed steads in Canada is Geo. Gale & Sons, of Waterville, Quebec. This firm rank also among the largest established, and are, therefore, in a position to advise the purchasing agents of hospitals as to what is best in the line of beds and such like. Perhaps the best known and most popular "Gale" bed is "The Royal Victoria," which is particularly suitable for, not only hospitals, but Sanatoria, Asylums and large Institutions as well. Geo. Gale & Sons have furnished many a hospital in Canada and their catalogue is worthy of careful perusal.

Hospital Equipment

The Canadian Feather and Mattress Co., Limited, Spruce Street, Toronto, wish to call the attention of hospital superintendents in Canada to their facilities for turning out in any quantity and on the shortest notice their well known line of bedding. This firm make a specialty of the highest grade goods only, and, as will be seen from their advertisement on page ii of this issue, they manufacture a full line of hair and felt mattresses, as also hair or feather pillows, comforters, etc. Doctors, ask them for prices.

Gluten Flour

There is a certain call for a genuine Gluten flour containing a high percentage of protein matter. The trouble has always been to make such a product thoroughly uniform and reliable, and at the same time so palatable and attractive for daily use in bread, gems, griddle cakes, etc., that even the exacting invalid would live and thrive upon it, and physicians could confidently commend it as diet, in marked cases of Acid Dyspepsia, Intestinal Indigestion, Diabetes, Obesity, Rheumatism, and ills arising from excess of Uric Acid.

We have been persistently working to this end, and without

*Publishers' Departm ent.

fear of competition from any source, offer as a result our "Gluten flour," carrying a higher percentage of protein matter than is required by the National Pure Food Law.

This product has a field of its own, separate and distinct from that of our Cresco Flour and Special Dietetic Food and other specialties, the merits of which are set forth elsewhere in our specialty letter. Its value will be recognized at once by the medical profession and their patients.

A sample will be sent physicians free on application. Farwell & Rhines, Watertown, N.Y., U.S.A.

Nitrous Oxide Gas as a General Anesthetic

One hundred years is a period long enough to determine the merits or demerits of and establish in use, or condemn to disuse, anything submitted to the judgment of men.

For over a hundred years Nitrous Oxide gas has been in use in dentistry, as an obtundent of pain. That it has proven suitable and acceptable as a general anesthetic is made plain by the fact that now, after the many years of practical use, it remains in constant and ever growing demand.

There never has been a just and valid reason for the substitution of something else for Nitrous Oxide gas, and it is not at all likely that a substitute for it would ever have been considered, but for the natural restlessness of humanity, the disposition to try new things when offered, regardless of requirement and without proof or evidence of advantages. Within recent years substitutes for Nitrous Oxide gas have been placed before the profession, and, as a result of particularly energetic effort on the part of those interested, they have been given wide and comprehensive tests. What is the result of these tests? A pronounced reaction in the professional sentiment, favoring gas and a greatly accelerated demand for the latter.

Substitutes for Nitrous Oxide gas will come and they will go. Nitrous Oxide gas, in strict accordance with the firmly fixed infallible law of "Survival of the Fittest," will go on forever. It will be of interest to medical superintendents to look into the merits of The Clark Oxygen and Nitrous Oxide Gas apparatus. This apparatus is so constructed that the gases are "rubbed" together several times on their way to the tubing, leading to the

inhaler, so that they are thoroughly mixed. The Clark Gas apparatus is ideal for use in hospitals and can be purchased at a very reasonable figure.

Invalid Chairs

Hospital superintendents, desirous of procuring for their institution, invalid, rolling, reclining and carrying chairs should write for a catalogue from The Gendron Manufacturing Co., Limited, Duchess Street, Toronto. This firm makes a specialty of these goods and can supply them at all prices, depending upon style and quality of goods used. The Gendron Co. have been manufacturing for a great many years and know the invalid chair business from A to Z. It will pay to get their quotations.

Hospital Furniture

It must be most gratifying to any firm to receive such a letter as appears in the F. S. Betz Co.'s advertisement on page ii of this issue of THE HOSPITAL WORLD. All one has to do, to once and for all satisfy himself that this concern turns out fine porcelain and white enameled steel furniture, is to read Mr. W. G. Maurice's letter from Hot Springs, Ark. After so doing, he cannot be any longer "a doubting Thomas."

A Modern Ventilating Apparatus

Of all buildings erected, it is essential that a hospital should be scientifically ventilated. Nothing could be more important for the health of the patients. Messrs. Sheldons, Limited, of Galt and Toronto, are desirous of calling the attention of hospital authorities to their Sheldon Ventilating Appliances, which have already been installed in many of the large hospitals throughout the Dominion, including Toronto General Hospital, St. Michael's Hospital, Toronto; Wellesley Private Hospital, Toronto; Children's Hospital in Winnipeg, and Ponaka Asylum, Ponaka, Alberta, all of these institutions having been equipped throughout with the Sheldon System. This is worthy of the attention of hospital trustees. Turn to page xxxvi of this issue of THE HOSPITAL WORLD and then sit right down and write the firm.

Ale for the Patient

The readers will find advertised in THE HOSPITAL WORLD a beverage most suitable for the invalid who is recuperating from illness and desires to be "put on his feet" with as little delay as possible. It is Cosgrave's "Half and Half." This malt preparation has undoubted recuperative qualities, being brewed from the purest of grains and aged by experts. Hospital men should bear this in mind and always carry a stock on hand for semi-private and private patients.

"Meinecke"

This name stands for everything that is best in many hospital specialties. Anything bearing this firm's trade-mark possesses, first, quality, and has a wearing ability second to none. It would be difficult to name an article in the hospital line that "Meinecke" does not make. These goods include bed and douche pans, urinals, dressing basins, irrigators, operating pads, ice helmets, ice bags, face and ear bags, invalid rings, hot water bags and bottles, sputum cups, etc., etc., etc. Before purchasing, consult "Meinecke" and you will lose nothing.

Mrs. Neil Mackinnon's Institute for Massage

Of recent months there has been opened, at No. 20 Walmer Road, Toronto, a private hospital for the administration of massage in all its branches. It is under the management of Mrs. Neil Mackinnon, who received her training as masseuse in Scotland. The house taken for the purpose is a beautiful private residence that is ideal for such an institution. It is large and airy, with a beautiful lawn and conservatory to the south. Mrs. Mackinnon has furnished the house from top to bottom, installed electric light cabinet, needle spray baths, and all the paraphernalia necessary to a high-class private hospital. Physicians will find that their patients will receive the best of treatment here, Mrs. Mackinnon having in her employ a Swedish masseur for male patients, who can receive treatment at any time. Patients in need of electrical treatment can receive this in any form and under the supervision of their own physician. Mrs. Mackinnon conducts her institution in a strictly ethical manner.

Bacterins

Bacterins (bacterial vaccines) are killed bacteria suspended in physiological salt solution. They stimulate the production of protective substances (antibodies) and are used to prevent or overcome bacterial infections.

Each bacterin is indicated for the infection caused by its corresponding bacterium; for instance, a staphylococcic bacterin is used for staphylococcic infection. Accurate diagnosis is therefore necessary.

For the general practitioner the use of stock bacterins is advisable because valuable time is thereby saved.

It is well recognized that mixed infections are usually present in infectious diseases. **"Mixed" and "polyvalent" (many different strains) bacterins are therefore becoming deservedly popular.** As regards their use, Polak states:

> "The mixed vaccines of reliable laboratories have given better results than when a single variety was used. This has been shown repeatedly in the blood picture. When an autogenous vaccine of a single strain used in large doses up to 500,000,000 has fail d to increase the leucocyte-count or diminish the polynuclear percentage, the mixed vaccines of several strains have promptly produced a marked leucocytosis. Even colon bacillus infections, such as the infection of a pelvic hematocele by the colon bacillus, have yielded more promptly to mixed vaccines of polyva'ent strains than when a single autogenous germ has been used." (*Journal American Medical Association*, November 25, 1911, p. 1738.)

The prophylactic value of bacterins is proved beyond question in typhoid fever, and preventive medicine suggests immunization against streptococcic, colon, staphylococcic, pneumococcic and tubercular infections by the use of their corresponding bacterins.

The results following the general use in the U. S. Army of typho-bacterin in protective vaccination against typhoid fever are little short of marvellous. "During the past three years 60,000 men completed the three inoculations; but twelve cases of typhoid fever developed during this time and no death occurred." (Phalen and Callison, *Medical Record*, December 9, 1911, p. 1203.)

We prepare the following:

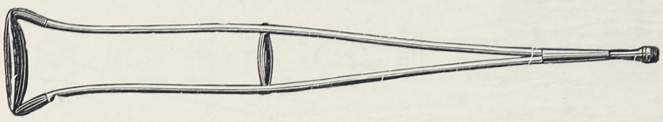
Acne-Bacterin (Acne Vaccine)
Cholera-Bacterin (Cholera Vaccine)
Coli-Bacterin (B. Coli Vaccine)
Influenza-Bacterin Mixed (Influenza Vaccine Mixed)
Friedlaender-Bacterin (Friedlaender Vaccine)
Neisser-Bacterin (Gonococcic Vaccine)
Neisser-Bacterin Mixed (Gonococcic Vaccine Mixed)
Neoformans-Bacterin (Neoformans Vaccine)
Pneumo-Bacterin (Pneumococcic Vaccine)
Pneumo-Bacterin Mixed (Pneumococcic Vaccine Mixed)
Pulmonary-Bacterin Mixed
Pyocyano-Bacterin Mixed (Pyocyaneus Vaccine)
Scarlatina-Bacterin (Scarlet Fever Vaccine)
Staphylo-Bacterin (Staphylococcic Vaccine)
Staphylo-Bacterin Mixed (Mixed Staphylococcic Vaccine)
Staphylo-Acne-Bacterin (Staphylo-Acne Vaccine)
Staphylo-Albus Bacterin (Staphylo-Albus Vaccine)
Staphylo-Aureus Bacterin (Staphylo-Aureus Vaccine)
Strepto-Bacterin (Streptococcic Vaccine)
Typho-Bacterin (Typhoid Vaccine)

Copies of Mulford's Working Bulletins mailed free upon request.
State bacterins in which specially interested.

H. K. MULFORD COMPANY

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St. Louis Kansas City Minneapolis San Francisco Atlanta Seattle Toronto



AUTHORS & COX, 135 Church St., Toronto

Oldest and most reliable manufacturers of Modern Supporters for after operation. Specialists in Trusses, Deformity Appliances, Artificial Limbs, Crutches, etc.

ESTABLISHED 49 YEARS - 'PHONE M. 2267

THE MEDICAL PROFESSION should always bear in mind that

"SANDELL" **523-525 YONGE ST.**

Makes a Specialty of

WINES OF EVERY KIND FOR INVALID USE

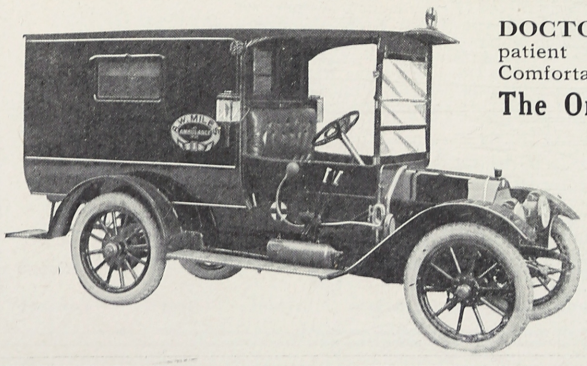
including Fine Ports, Clarets, and Whiskies. "Sandell" guarantees the absolute purity of everything he supplies. "Sandell" caters particularly for out-of-town trade.

PHONE N. 192 MOTOR DELIVERY

HORLICK'S MALTED MILK

For Infants and Invalids

THE STANDARD FOOD OF ITS TYPE



DOCTOR,--If you would like your patient removed Quickly and yet Comfortably, phone to College 2757 for

The Only Motor Ambulance in Toronto

This ambulance embodies everything modern, has a special mattress to ensure perfect comfort, the chassis is a Chalmers Car free from vibration and is hung on springs peculiarly adapted to ambulance work.

Charges strictly moderate.

Arthur W. Miles

395 COLLEGE ST. TORONTO

The Medical Press and Experiments with

BOVRIL

The Report on the nutritive value of Bovril read before the annual meeting of the British Medical Association is attracting wide attention in the medical profession.

The "British Medical Journal," of September 16 devoted some six pages to a detailed account of the recent experiments, in which it was shown that **in the case of human beings the body-building power of Bovril was "even more marked"** than had been previously shown in the experiments with animals.

A further article has just appeared in the "Medical Times," and that journal points out that the experiments were originally conducted "with the object of ascertaining whether a certain beef extract (Bovril) supplied to the Government had any nutritive value or not. The results were simply startling."

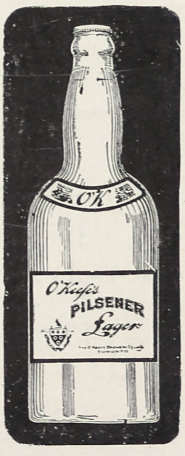
"It was found that in all cases the administration of the extract (Bovril) caused an immediate increase in weight."

One important point brought out by these experiments is that this increase in weight is in tissue and muscle, and that **Bovril must therefore be regarded as a true nutrient.**

In Hospital Practice

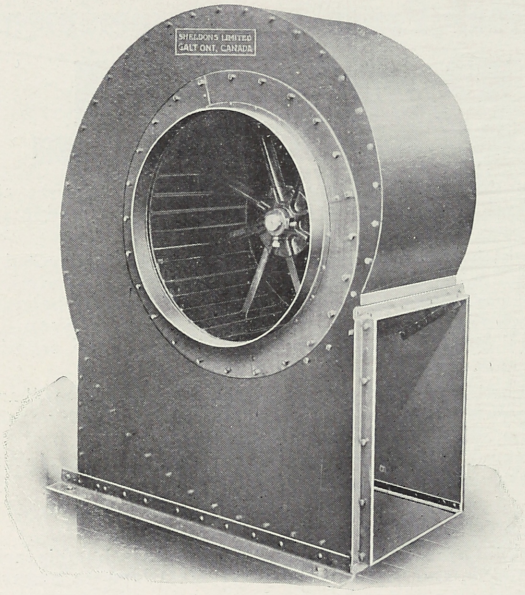


Doctor, when ordering your patient a mild stimulant, just bear in mind the name **"O'KEEFE."**



It stands for everything that is best in Malt Goods, and in purity **Cannot be Excelled.**





The Modern Hospital Must Be Equipped with Ventilating Appliances of the Highest Possible Standard

Canada's Greatest Hospitals are Equipped Exclusively with Sheldon Ventilating Appliances.

Toronto General Hospital, entire equipment forty-one (41) separate units.

St. Michael's Hospital, Toronto, entire equipment.

Wellesley Private Hospital, Toronto, entire equipment.

Children's Hospital, Winnipeg, entire equipment.

Ponoka Asylum, Ponoka, Alberta, entire equipment.

SHELDON'S LIMITED

Engineers and Manufacturers

Toronto Office :
609 KENT BLDG., TORONTO

Head Office and Works :
GALT, ONT.

Marvel "Whirling Spray" Syringe

The latest and best syringe ever invented to thoroughly cleanse the Vagina

THE MARVEL

by reason of its peculiar construction, dilates and flushes the vaginal passage with a volume of whirling fluid, which smoothes out the folds and permits the injection to come in contact with its entire surface instantly dissolving and washing out all secretions and discharges.



Physicians should recommend the Marvel syringe in all cases of Leucorrhoea, Vaginitis, and all Womb Troubles, as it is warranted to give entire satisfaction.

:: IT IS A ::
MARVEL

The Marvel Company was awarded the Gold Medal, Diploma and Certificate of Approbation by the Societe D'Hygiene de France, at Paris, October 9, 1902.

All Canadian Druggists and Dealers in Surgical Instruments sell it.

National Drug & Chemical Co., Canadian Agents

FOR LITERATURE, ADDRESS

MARVEL COMPANY, New York

MARKS ARTIFICIAL LIMBS

Over 40,000 in Use Throughout the Civilized World



The use of Marks Patent rubber hands and feet on artificial limbs simplifies the construction so that limbs can be worn for many years without requiring repairs. Persons engaged in every conceivable occupation operate on spring mattress rubber feet, or use rubber hands to great advantage.

AMPUTATION ABOVE KNEE

To A. A. Marks, N. Y.—"The artificial leg for Miss Janie Scott came to hand some time ago. Miss Scott is managing with the limb very nicely. She uses a treadle sewing machine, walks to church, and in fact does everything and goes everywhere the same as persons with natural legs."—P. A. Grant, Wauganui, New Zealand.

Received Forty-six Highest Awards.

Send for Manual of Artificial Limbs. It is a cloth-bound book containing 416 pages, 724 illustrations and a thousand testimonials. Instructions are given how to take measurements and obtain artificial limbs without leaving home.

No Duty on Artificial Limbs.—On June 21st, 1897, the Dominion Government passed a new tariff. By provision of Item No. 479, artificial limbs are admitted into Canada duty free.

A. A. MARKS, 701 Broadway, New York, U. S. A.

Established 59 Years

It is worth while bearing in mind, Doctor, that

The Utopia Disability Policy

issued by The General Accident Assurance Company of Canada has a special clause allowing extra indemnity for hospital expenses or surgeons' fees for operations.

Might we suggest that, when the matter of Accident and Sickness Insurance is referred to you by patients, you recommend The Utopia Policy for the above and following reasons:

The Utopia Policy covers all accidents and all diseases.
The Utopia Policy gives weekly indemnity for 200 weeks.
The Utopia Policy gives fixed indemnities for certain forms of injury.
All indemnities increase 10% annually for 5 years.

Under this policy, if an injury does not result in a loss of time but requires treatment by a physician, the Company will pay the cost thereof, not to exceed $25.00. If the insured is unable to care for himself or communicate with friends, the Company will defray the expense of so doing up to $100.00.

Physicians themselves should bear in mind that we issue

A Special Utopia Policy for Physicians

covering all accidents and all diseases, giving double benefits for septicaemia or private vehicle accidents. For full particulars apply to

The

General Accident Assurance Company

Continental Life Building

Peleg Howland, Esq., President

TORONTO

Jno. J. Durance, Manager

The attention of The Canadian Medical Profession is respectfully called to

SANOL

as an aid in the treatment of gallstones. It is a preparation that has been subjected to scientific tests, and when "weighed in the balance," it has not "been found wanting," On the other hand, Physicians will find in SANOL a pharmaceutical preparation of scientific merit. It is most prompt in its action in cases of stone in the Bladder or Kidney, and will be found particularly valuable in Uric Acid Diathesis.

The Profession are also requested to try

SANOL'S ANTIDIABETES

in the treatment of Diabetes Mellitus and Insipidus.

PRICE PER BOTTLE

16 Oz. Sanol, $1.50 **Sanol's Antidiabetes, $2.00**

FULL PARTICULARS CAN BE AT ONCE OBTAINED FROM

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General Accident, Fire and Life Assurance Corporation, Limited

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Personal Accident Insurance, Health Insurance, Industrial Sickness and Accident Insurance, Employers' and General Liability Contracts, Automobile Policies, Burglary Policies.

The Accident and Sickness Contracts of this Corporation are unexcelled.

Write for particulars respecting our special Policy for Doctors and Dentists—the Physicians' Utopia.



THE Lindman Truss is **a comfortable Truss.** It does not chafe the wearer at any point, because it rests solely upon the pads and requires no annoying belt or understraps. It cannot injure the spine, as it comes in contact only with the lumbar muscles and the Hernia; the Truss thus **forming a comfortable support instead of being a torture.**

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PHONE COLLEGE 3949

CODY BROS.
AMBULANCE

Pneumatic Mattress Electric Lights
Experienced Attendants

899 BLOOR ST. WEST

HOSPITAL SUPERINTENDENTS AND PHYSICIANS

WHEN IN NEED OF

A Private Ambulance

SHOULD CALL TEL. N. 2415

WM. N. KNECHTEL
1095 YONGE ST.

THE PHYSICIANS AND SURGEONS ACCOUNT REGISTER SYSTEM AND CASE RECORDER

COVERS the doctor's business completely in **one single writing.** It gives to the doctor his clinical records, his accounts posted to the minute, the original of his prescriptions, his calling list made up for the following day, and absolutely stops all forgotten calls and forgotten charges, in less time than it would take to keep his books alone in the old way. THIS system is a time-saver and a money-maker.

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IDEAL FOR HOSPITALS, SANATORIA AND PUBLIC BUILDINGS

Medical Superintendents should enquire into the merits of

THE GOLDEN METAL WEATHERSTRIP

Nothing could be more suitable for Institutions and Private Dwellings

The Golden Metal Weatherstrip is the only ALL METAL interlocking strip on the market. It is the weatherstrip par excellence for the Hospital Ward or Sick-room. The window can be removed at any time to replace the window cord without the metal being interfered with. The Golden Metal Weatherstrip makes the window or door DRAUGHT-PROOF, but in no way interferes with necessary ventilation.

The Golden All Metal Weatherstrip Company
152 Bay Street, TORONTO
Phone Main 64 or North 3661 Room 6

BANNERMAN'S
INTRA-VENOUS SOLUTION
Is a Remedy that Stands the Test

Its administration increases the red-cell-count, the haemoglobin, the resisting powers and the nutrition and weight of the patient.

A resume of many cases shows an average increase in six weeks of 8¾ pounds and a gain of 645,000 red cells in the same time.

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SELLING AGENTS FOR CANADA

TORONTO Gendron CANADA TRADE MARK REG.

CATALOGUE "C"
WILL TELL YOU
ALL ABOUT
INVALID CHAIRS
WRITE FOR IT



TORONTO Gendron CANADA

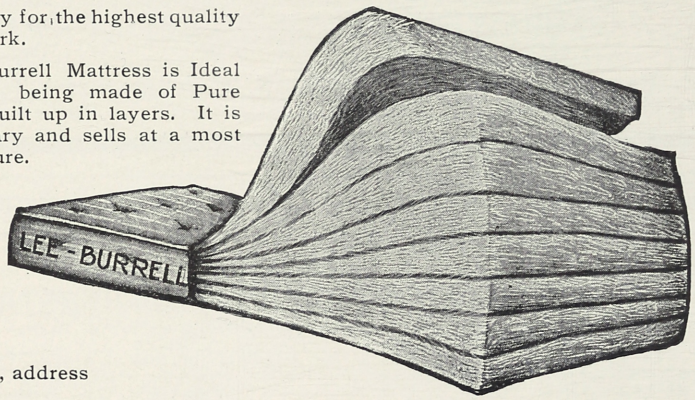
THE GENDRON MFG. CO. LIMITED – TORONTO – CANADA

When Ordering Mattresses for the Hospital, Doctor, just recollect the name

LEE-BURRELL

It stands only for the highest quality in mattress work.

The Lee-Burrell Mattress is Ideal for Hospitals, being made of Pure Cotton Felt, built up in layers. It is Strictly Sanitary and sells at a most reasonable figure.



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YOUR FRIENDS WILL ENJOY IT



COSGRAVE'S HALF & HALF

¶ The wonderful health-giving qualities in the beer made of the pure grains, and brewed and aged as our expert brewers know how. People who are "run down"—fatigued easily—and need toning up will be invigorated by Cosgrave's Half and Half. On sale in pint and quart Crown stopper bottles at all liquor stores.

Pure Water a Necessity

Physicians and nurses the world over recognize the paramount importance of pure water, especially in connection with the treatment of patients whose systems are so debilitated that typhoid and other germs find a ready foothold.

BELL'S Patent, Vertical, Mechanical, Pressure FILTERS

As Used by the Governor-General of Canada, H.R.H. Duke of Connaught

make 97 per cent. purification of water a practical possibility. The points of superiority which make BELL'S FILTERS best for hospitals, asylums, retreats, sanitariums and other similar institutions where "Cleanliness IS Godliness" are:

(1) Simplicity of operation.

(2) Low initial cost.

(3) Practical indestructibility.

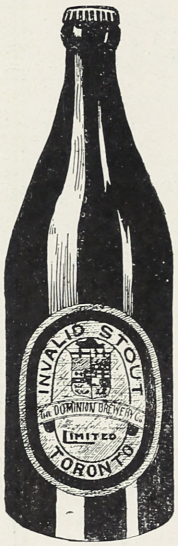
(4) Experience. BELL FILTERS have been used in many English hospitals for twenty years, and have been ordered for Wellesley Hospital, Toronto.

For Handsome Free Book on Water write to

BELL FILTRATION COMPANY

OF CANADA, LIMITED

305 Kent Building, Toronto, Ont.



Give Convalescents

INVALID STOUT

for a Strengthening Tonic

It contains all of the known nutritive elements of the finest barley, malt and hops.

When Stout is needed, specify Invalid Stout.

At all dealers.

Brewed and bottled by

DOMINION BREWERY COMPANY, Limited, Toronto

INTERNATIONAL DAIRY SHOW 1911 ASSOCIATION

Facsimile of the Silver Medal awarded to the City Dairy Co., Limited, at the International Dairy Show held in Milwaukee, Wisconsin, in October, 1911.

Second Prize CERTIFIED MILK 1911 CITY DAIRY FARMS TORONTO

In the Bacteria Count we scored "Perfect" at the

International Dairy Show, Milwaukee

and

National Dairy Show, Chicago

Samples of City Dairy "Certified Milk" were sent in competition with milk from the length and breadth of the United States. In the matter of low bacteria count, which is the principal quality to be desired in Certified Milk, the City Dairy product received the highest possible score.

Price: 4 City Dairy tickets per quart; 2 per pint.

Packed for protection against the elements.

Phone College 2040.

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Each book is an easy, comprehensive, philosophical and stimulating survey of the subject, a bird's-eye view, a statement of principles, meanings and characteristics.

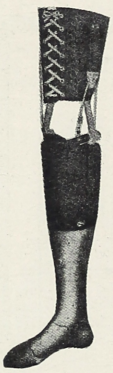
A book for Reading and not only for reference.

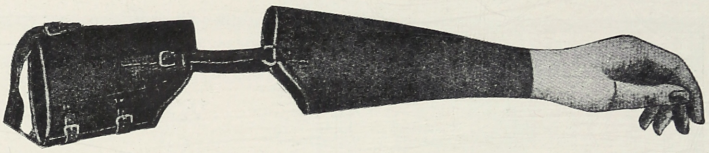
Books not above the head of the average reader.

Each book is copyrighted, and all things considered is the cheapest line of books ever produced.

Cloth, 35c. **SEND FOR LIST OF TITLES.**

WM. BRIGGS, Publisher, 29-37 Richmond St. W., TORONTO





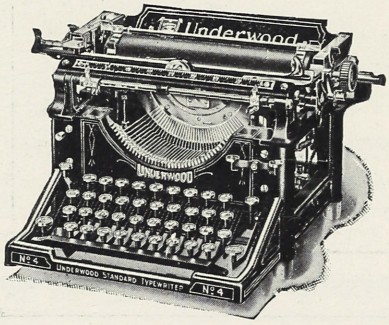
DOMINION ARTIFICIAL LIMB CO., Ltd.

Canadian Patent Holders for the

DOUBLE ADJUSTABLE SLIP SOCKET LEGS AND PERFECTION HANDS AND ARMS

Canadian Patents owned by us cost $10,000

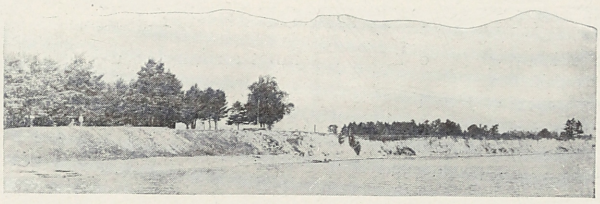
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PRETTY soon you will need a typewriter. Get a good one. It pays to invest in an Underwood.

UNITED TYPEWRITER CO.
Limited
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TORONTO, 425,000 Population



Beautiful Lakeshore Residential Property.

100% Increase in Ten Years.

TORONTO, by the recent civic census, has arrived at a population of 425,000, an increase of 100% in the past ten years. The city is now advancing at the rate of 35,000 new citizens annually, and is stretching out into the beautiful suburbs at the rate of about 5,000 homes each year. Land is increasing in value so rapidly that any investor with $100 and upward can secure a safe and profitable realty investment here.

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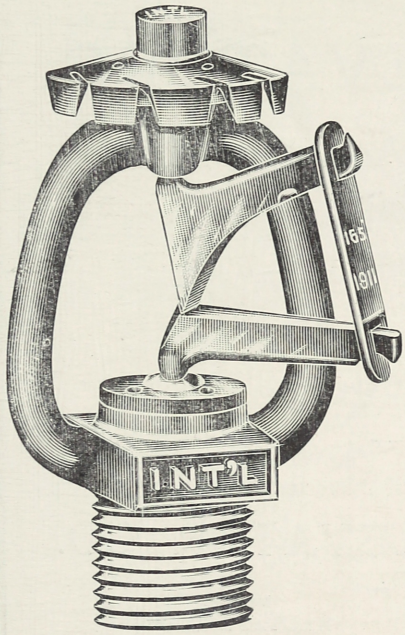
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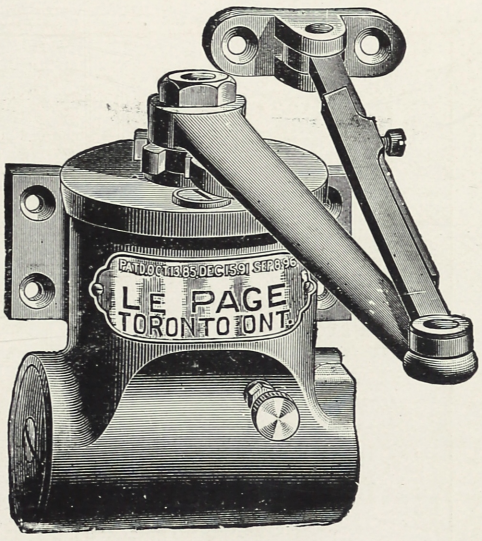
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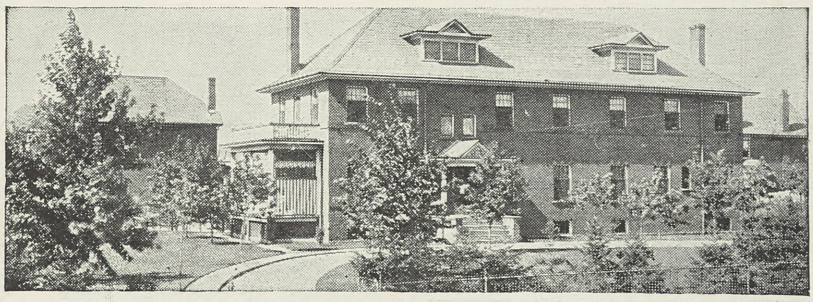
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